

Speaking about ourselves...

A bewildering range of periodical literature is currently published, making competing demands on the reader's time and attention. Any addition, therefore, especially in the present emergency, must justify its need and urgency. Viewed in this context, *University News* has, indeed, a purpose to fulfil right now and in future, that is, to be a medium of communication among the universities in India, various constituent and affiliated colleges, and other institutions of higher education and research in the country—a purpose which is not quite fulfilled by any other existing publication.

We feel that for lack of an all-India medium for disseminating information in a compact form, a great variety of new developments in the field of higher education—fresh facilities being created, the ever-growing number of scholarships and fellowships available both in India and abroad, the production of cheaper editions of textbooks, the presence in the country of several distinguished visiting professors from abroad, and a host of other academic and extra-curricular activities—go unnoticed or receive lesser attention than they deserve and thus do not create the desired impact on those who are likely to be affected by them. *University News* seeks to fill this lacuna by providing an effective link on a national basis between various educational institutions on the one hand and those interested in educational development on the other.

With an eye to promoting national integration and establishing closer liaison between the universities and the general public, the journal will endeavour to spotlight educational problems in a proper perspective and to keep the public informed of happenings in the educational world.

Education is a vital element for the development of our society and in the ultimate analysis, the strength and prosperity of a country is drawn as much from its physical and material resources as from the mental and emotional quality of its citizens. Yet one wonders if our national approach to educational efficiency has not suffered from slovenliness. Even the Education Member of the Planning Commission had to confess publicly the other day that "we are in the unenviable position of one who does not have resources to go forward and yet having gone halfway, cannot retreat". He, therefore, advised us to cease indulging in "fresh" thinking. By highlighting the weak and strong points in our planning and by promoting exchange of views and ideas among prominent educationists, *University News* will help in the balanced development of education.

Your co-operation and support is solicited in making *University News* a useful and interesting journal. Contributions and any suggestions for the improvement of its news content will be gratefully received.

B. D. Lardla

Secretary, Inter-University Board of India

National Emergency

Educational Priorities Reviewed

It is understood that the Planning Commission has advised the State Governments to follow a selective approach in respect of educational programmes while reorientating their development plans in view of the national emergency.

The State Governments have been advised to postpone proposals for opening new universities and starting new Arts colleges, but to counterbalance this by increasing admission capacity in some of the smaller colleges.

Under the third Five-Year Plan provision had been made for 19 new universities and an amount of Rs. 433.40 lakh had been allocated in the State sector for this purpose. Of these 19 universities, 11 have already been created, thus bringing the existing total to 55.

While it is stressed that NCC and ACC programmes should be expanded, the expansion of cultural programmes is not favoured. Similarly, while recommending that targets for technical education should be raised, the Planning Commission would like that these higher targets should be realised not by increasing financial provisions under the Plan but by ensuring the utmost economy in respect of buildings.

At the secondary level, it is recommended that facilities for teaching science and technical subjects should be expanded and improved, but the programmes for conversion of high schools into higher secondary schools and primary schools into basic schools might be staggered.

Prof. Thacker Deplores Launching of Too Many Reforms

Prof. M. S. Thacker, Member (Education), Planning Commission, in his convocation address at Lucknow University on December 22, observed that in the matter of educational reforms two mistakes had been committed, "which have landed us in serious difficulties".

"We have launched upon programmes without proper and adequate preparation, which inevitably have led to failure, weakening our faith in the reform itself. Again, many reforms have been simultaneously introduced without due regard to the limitation of organisation, personnel and resources. The result is that today we are in the unenviable position of one who does not have the resources to go forward and yet, having gone halfway, cannot retreat."

In the present situation, Prof. Thacker suggested, we should complete our structural changes as quickly as possible and cry a halt to "fresh" thinking and "brilliant" ideas and bring the system to an even keel. He, however, added that the uninterrupted implementation of accepted reforms should not mean complete stagnation of educational thought.

Restricted Admissions

Referring to poor standards in universities generally, Prof. Thacker remarked that the rapid expansion in numbers had severely strained our resources in teachers, equipment and accommodation. In view of the limited resources at our disposal, the only alternative was to restrict the number of students entering the universities. He, however, added that such a measure must be supplemented by opening new avenues of training and employment at the end of the middle and higher secondary stages.

He further stated that though the expenditure on education would increase from 1% in 1950-51 to 2.6% of the national income in 1965-66, that was not enough; in Britain and America, it was 4%, in Japan over 6%, and in Russia 8% of the national income.

He quoted the following conclusion reached at a conference held in Italy in 1960 to discuss the economic aspects of educational development in Europe: "The returns on

education, both individually and socially, are at least as high as those in physical capital. More important, the development of physical equipment of society may largely be wasted unless there is the trained talent to work it." In this connection he also cited the findings of the Soviet academician Strumilin, who calculated that four years at a primary school increased a man's efficiency by 44 per cent; at the secondary and university stages, the increase in efficiency was calculated at 108 and 300 per cent respectively.



Dr. Zakir Husain, Chancellor of Delhi University, conferring the honorary degree of Doctor of Laws on the West German President, Dr. Heinrich Lübke at a special convocation held at the university on November 28, 1962.

President's Awards

Dr. A.L. Mudaliar, Vice Chancellor of Madras University, has been awarded Padma Vibhushan this year. He received the award of Padma Bhushan last year.

Dr. T.R. Seshadri, Professor and Head of the Department of Chemistry has been awarded Padma Bhushan.

University Film Council

The University Grants Commission has approved the release of a grant of Rs. 2,500 to each of the 29 universities represented on the University Film Council. The funds will be used for the purchase of films and other equipment by the Council.

Speedy Execution of Plans Urged

His Highness Maharaja Jayachamaraja Wadiyar Babadur, in his address at the convocation of Osmania University on December 13, emphasised the need to carry out all educational plans with "rapidity and concentration". Progress in any field requires a target, a time-limit, and a pervading sense of urgency, he pointed out.

"Revolutionary advance in science and world communication has brought not only the horizons nearer but also the future closer. Whatever has to be done is best done without delay."

He warned against the faults of both unthinking haste and stagnant indecision and said: "We have to build quickly and build to last."

Among the problems that demanded steadfast attention, he mentioned "the achievement of high academic standards, the maintenance of uniformity in the country as a whole, the inculcation of discipline and right conduct, the promotion of high standards of physical fitness among the students, and a speedy decision of a uniform nationwide character on the question of the language medium of university education".

Yuvraj Karan Singh Receives Ph.D.

Among the 33 candidates admitted to the Ph. D. degree at the 40th annual convocation of Delhi University, held on December 1, 1962, was Yuvraj Karan Singh, Sadr-i-Riyasat of Jammu & Kashmir.

Yuvraj Karan Singh, who is also the Chancellor of Jammu & Kashmir University, sat among students when the convocation was declared open. But after the degree of Doctor of Philosophy was conferred on him for his thesis on Aurobindo's Philosophy, he moved on to the dais to occupy the chair meant for the Chancellor of Jammu & Kashmir University. Later, the Yuvraj announced an offer of an endowment of Rs. 10,000 for presenting a gold medal every year to the best student in M.A. Political Science.

In all 4,249 candidates were admitted to various degrees. The number of candidates who took the M.A. degree was 714, and only 77 took the M.Sc. The B.A. degree-holders were the largest in number — 1,632.

I.U.B. Meeting

The 38th annual meeting of the Inter-University Board of India is to be held at S.N.D.T. Women's University, Bombay, from February 7 to 9. The meeting is likely to be inaugurated by Mrs. Vijayalakshmi Pandit, Governor of Bombay, who is also the Chancellor of the university.

Besides the Vice-Chancellors of 40 universities (38 Indian and two Ceylonese) who are members of the Board, the Union Minister of Defence; the Chairman, UGC; the Secretary, Ministry of Education; the Director-General, NCC; and representatives of the Ministries of Education, Scientific Research & Cultural Affairs, Health, Food & Agriculture, the Planning Commission, and the UPSC are expected to attend. Representatives of the British Council, U.S. Educational Foundation and Rockefeller Foundation are expected to attend as observers.

The Standing Committee of the Board at present consists of the following:

1. Dr. P.K. Parija, Vice-Chancellor, Utkal University (Chairman).
2. Shri S. Govindarajulu, Vice-Chancellor, Sri Venkateswara University (President of the year).
3. Dr. A.L. Mudaliar, Vice-Chancellor, Madras University.
4. Dr. T. Sen, Rector, Jadavpur University.
5. Shri D. C. Pavate, Vice-Chancellor, Karnatak University.
6. Dr. J. M. Mehta, Vice-Chancellor, M.S. University of Baroda.
7. Dr. A. C. Jashi, Vice-Chancellor, Punjab University.
8. Shri D. S. Reddi, Vice-Chancellor, Osmania University.
9. (Vacant).

U.G.C. Questionnaire

The committee of UGC appointed to go into the question of standards of higher education is understood to have circulated a questionnaire to all universities to collect information on standards of education. Shri Govindarajulu, Vice-Chancellor of Sri Venkateswara University is the chairman of this committee.

All-India Educational Service

Six State Governments—those of Bihar, Gujarat, Jammu & Kashmir, Kerala, Orissa and Uttar Pradesh—have agreed in principle to the proposal for the constitution of an All-India Educational Service. Assam has given provisional consent, and Mysore's concurrence is subject to certain conditions. Madras and Maharashtra are not in favour of the scheme.

This information was given by Mr. Lal Bahadur Shastri, Union Home Minister, in the Rajya Sabha in November last.

N.C.C. Training

To discuss with the Vice-Chancellors questions relating to the introduction of NCC training in universities, the Defence Minister, Shri Y.B. Chavan, will attend the forthcoming meeting of the Inter-University Board of India in Bombay on February 9. Major-General Virendra Singh, Director-General of NCC, will accompany the Defence Minister and participate in the discussion.

The points to be discussed include the introduction of an element of compulsion and the evolution of a uniform pattern of NCC training in all universities.

International Science Centre

An International Institute of Science and Technology is proposed to be set up in Europe. Although the idea of the institute is being advanced by NATO, the institute will be set primarily for the advancement of scientific knowledge, and scholars from non-member nations will also be invited as researchers, instructors and students. When completed, the institute is expected to cost \$ 56 million.

Railway Concession

Though the Railway Board has decided to withdraw from January 1 certain categories of concessions, including the one admissible to participants in inter-university sports in view of the present emergency, concessions such as those admissible to students travelling between their homes and educational institutions, the Bharat Scouts and Girl Guides, trained nurses, overseas tourists, etc. will continue for the present.

"Discipline and orderly behaviour are the marks of good life anywhere, but they are of special importance in seats of learning... We are a democratic people and the primary guardians of our right conduct should be our own good sense and love of peace and order."

—Maharaja Jayachamaraja Wadiyar Bahadur



The Chinese invasion has infused new enthusiasm among NCC cadets. Here Mrs. Tarkeshwari Sinha, Union Deputy Finance Minister, is seen taking the salute from a band of NCC cadets belonging to the Dev Samaj College for Girls, Ambala City.

Science and Religion not Antagonistic

—Radhakrishnan

Gandhi Bhawan, a beautiful three-winged building, constructed at a cost of Rs 2 lakh (of which Rs. 50,000 each were given by the Gandhi Smarak Nidhi and UGC), was opened recently at the Punjab University campus by the President of India, Dr. Radhakrishnan.

While declaring open the building, the President said: "Education is required to cater to the different sides of man's nature. Science and religion are not antagonistic. While science reveals the cosmic mysteries and the wonders of the universe it touches but the surface, for to understand and know the principles of the cosmos other disciplines are necessary, like philosophy and religion. Man is a creature of reason and spirit. His reason must be satisfied and his mind nourished. Science and religion satisfy this complex of spirit and reason."

Vice Chancellor's Speech

Earlier, the Vice-Chancellor, Dr. A. C. Joshi, commenting on the world-wide clash between science and religion, said that the latter appeared to be fighting a losing battle. "The minds of the youth are full of agnosticism and disbelief. This is partly so because the results of the applications of science are demonstrably impressive. It is much more due to the incapacity of religion to change with the changing times... science has the wonderful capacity to grow as new facts come to light. A new discovery does not discredit my one. It adds to the glory of all. Relativity has not dethroned Newton. It has placed him even on a higher pedestal."

Continuing, the Vice-Chancellor said: "The founders of the faiths were great thinkers, social reformers, and revolutionaries in action. The followers, however, walk on the beaten track and are lost in ritual dogma. Mahatma Gandhi had the courage to experiment with religion. His experience led him to conclude that *God is Truth* but finally he came to the view that *Truth is God*. This simple statement marks an epoch in the reconciliation between science and religion, and this has been

inscribed right over the entrance to the Gandhi Bhawan."

The Vice-Chancellor said that no seat of higher education or any system of education could be considered satisfactory if it was divorced completely from training in ethical and spiritual values. "Knowledge alone divorced from moral restraints of any kind can often do more harm to a society than ignorance. This is to some extent the tragedy of the modern world."

On December 1, addressing the 40th convocation of Delhi University, Dr. C. P. Ramaswami Aiyar, Vice-Chancellor of Annamalai University, also expressed his views on the question of religious and moral instruction in universities.

"Personally I take the view that if a university deliberately excludes from its scope and its curriculum all courses with a religious content, it ignores at the same time the unalterable fact that religion has exercised a dominating influence over the life and history of man and the shaping of his ideas."

Referring to the secular nature of universities, Dr. Aiyar said: "There are, undoubtedly, some constitutional limitations facing the universities in India, but I am afraid that a too technical and narrow interpretation has been put on the Constitution."

Gandhi Bhawan at Delhi Campus

Gandhi Bhawan was inaugurated at Delhi University on September 26 by Mr. Jayaprakash Narayan. Mr. Narayan advised the students that they visit the Bhawan not to worship Gandhiji, but to study and understand what Gandhiji taught and lived for.

Apart from Punjab and Delhi, Mysore University has established a Gandhi Bhawan at its campus. In course of time many other universities expect to build such centres.

Accord on Role of Language

Amidst the multiplicity of views expressed by educationists on the question of the medium of instruction, a fundamental agreement is clearly discernible—that language should be a unifying force rather than a disruptive one.

Addressing the 40th annual convocation of Delhi University on

December 1, 1962, Dr. C.P. Ramaswami Aiyar, Vice-Chancellor of Annamalai University, said that language should not be regarded as only one more subject included in the curriculum, but as a medium of expression and instruction.

Inter-change of teachers and students, he said, would give rise to the necessity of a common academic language rather than a purely regional language. English could not, and should not, replace the mother tongue, but at the same time, no regional language could bind together the academic world of India. The problem before the educational administrators was to maintain the academic unity of India and, at the same time, to enrich the mother tongue and Hindi, Dr. Aiyar said.

His Highness Maharaja Jayachamaraj Wadiyar, referring to the problem of language in his convocation address at Osmania University on December 13, called for a quick and far-sighted decision and wise and comprehensive planning. "The central fact," he said, "is that language should not be allowed to divide the nation." He emphasised that the replacement of English by any or all of our languages must follow, and not precede, the development of our languages to a position of sufficient strength to deal adequately with all branches of modern scientific learning.

Gujarat Revises Policy

Recently 70 members of the Senate of Gujarat University, in a joint representation sent to the Vice-Chancellor, urged that in the matter of the medium of instruction, the university should conform to the national policy which is aimed at achieving integration. They demanded that the university statutes which provided for the exclusive use of Gujarati as the medium of instruction and examination should be amended following the Supreme Court of India upholding the judgement of the Gujarat High Court that the university's policy was legally untenable.

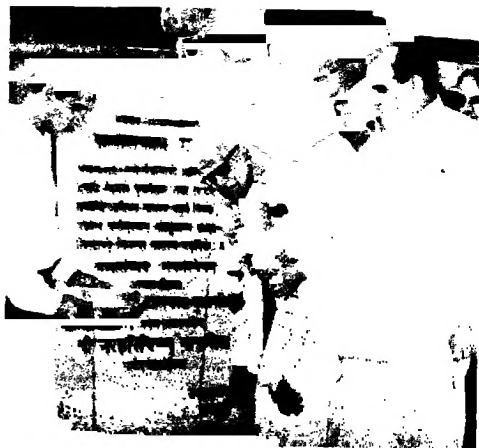
In reply to this representation, the vice-Chancellor has informed the Senate members that the Syndicate has decided to reframe the university statutes to permit the optional use of Hindi or English as the medium of instruction and examination.

Campus News

● Utkal University has shifted its headquarters from Cuttack to its new campus at Bhubaneswar with the start of the current academic session. While nine departments are now functioning at Bhubaneswar, the Departments of Geology and Zoology continue to be at the Ravenshaw College, Cuttack. The University College of Engineering and the M. S. Law College are at Burla and Cuttack respectively as heretofore.

● A new hostel for 200 women students is under construction at the Punjab University campus, on the completion of which hostel accommodation for 1,600 men and 400 women students would be available.

● Dr. S. Radhakrishnan recently declared open the three-storeyed Arts Faculty building built at a cost of Rs. 18 lakh, at the Punjab University campus. Two large auditoriums are provided between the two blocks of the building for extension lectures.



New Universities

Agricultural

U. P. Agricultural University, Pant Nagar (Dist. Nainital), which started functioning from July 1960, is patterned after Land Grant Universities in the United States. Under terms of an agreement between the Government of India and the U. S., a grant of Rs. 2.2 crores was made to the Uttar Pradesh Government for the construction of plants and other facilities in the university. Another provision of the contract enables staff members of the university to go to the University of Illinois for advanced study.

Rajasthan Agricultural University was inaugurated on July 12, 1962 by Dr. Sampurnanand, the State Governor. Mr. G. B. K. Hooja, M.A., I.A.S., assumed charge as its first Vice-Chancellor on July 5. The university is patterned after the set-up of Land Grant Colleges of the United States.

Punjab Agricultural University came into existence on November 17, 1962, with Shri P.N. Thapar, I.C.S., as its first Vice-Chancellor. The university has at present three constituent colleges: the College of Agriculture, Ludhiana; the College of Agriculture, Hissar; and the College of Veterinary Science & Animal Husbandry, Hissar. In addition to these colleges, which the university has taken over from

the State Government, all research stations and sub-stations in the State will also go under the jurisdiction of the new university. During the third Five-Year Plan period, it is proposed to set up colleges in Agricultural Engineering, Home Science, and Basic Sciences & Humanities.

Sanskrit

Kameshwara Singh Darbhanga Sanskrit University, Darbhanga, established by the Bihar Government early last year, expects to start its teaching departments in July 1963. The university at present conducts examinations from Prathama to Acharya. In 1962, 1,600 candidates appeared for these two examinations, of which about 50% were successful.

The other new universities started during 1961-62 are: Kalyani University, (West Bengal); North Bengal University, Silguri; Rabindra Bharati (Tagore) University, Calcutta; Punjabi University, Patiala; Magadh University, Bodh Gaya; Orissa University of Agriculture and Technology, Bhubaneswar; Jodhpur University; and Shivaji University, Kolhapur.

Colleges

Rajasthan: The university has taken over four local under-graduate colleges from the State Government and reorganised the studies so that all under-graduates in the Science Departments have been

Shri N.V. Gadgil laying the foundation stone of the Arts Faculty Building at Kurukshetra University. Shri Suraj Bhan, Vice-Chancellor, is on the right.

grouped together in the Maharaja College and all Arts students in the former Rajasthan College. All under-graduate students in the Faculty of Commerce will pursue their studies in the College of Commerce, and all girl students, both of Arts and Science subjects, will be attached to the Maharani College.

The different departments of studies in all these colleges will be supervised by the corresponding Heads of post-graduate departments, but a Director has been appointed for each college to look after the administration and the general well-being of the students. This reorganisation has brought approximately 250 teachers in the Government service under the jurisdiction of the university. Besides these four university colleges, there are about 65 other colleges affiliated to the university.

Rajasthan Agricultural: The university, which at present consists of the Rajasthan College of Agriculture, Udaipur, the S.K.N. Agricultural College, Jodhpur, and the Rajasthan College of Veterinary Science & Animal Husbandry, Bikaner, proposes to bring three more colleges within its ambit. The new colleges to be included are:

the College of Technology & Agricultural Engineering, the College of Home Science and the School of Basic Sciences and Humanities.

Utkal: Three new colleges—the Bolangir Women's College, Bolangir; the Medical College, Berhampur; and the Training College, Sambalpur—have been granted affiliation by the university, thus bringing the total number of affiliated colleges to 45.

Sri Venkateswara: The Adoni Arts & Science College, Adoni, which provides instruction in the pre-university and B.A. courses, started functioning during the current academic year.

The Government of Andhra Pradesh have started Venkateswara Agricultural College at Tirupati.

U.P. Agricultural: The College of Agricultural Engineering & Technology opened in 1962. Units functioning since 1960 are: the College of Agriculture, the College of Veterinary Science, and the School of Basic Sciences and Humanities.

Courses of Study

Agra: The first Faculty of Homoeopathy at Agra University came into existence with Dr. J.C. Sharma, Principal of the National Homoeopathic Medical College, known as its Dean.

The National Homoeopathic Medical College & Hospital, financed and managed by the Uttar Pradesh Government since 1956, runs a five-year regular course leading to the H.M.S. degree (Graduate in Homoeopathic Medicine and Surgery) of Agra University. The minimum qualification for admission is Intermediate Science with Biology group. The minimum age for admission is 17 years.

Jamia Millia: The Teachers' College, which is a constituent unit of Jamia Millia Islamia, is working on details of an integrated course for training of teachers. The duration of the course will be six years for matriculates and five years for secondary-passed students. The course would include theory and practice of education prescribed by M. Ed. students as well as the oral education courses prescribed by the first degree of a university.

Karnatak: The university has established three new departments, that is, of Law, Education and Commerce.

A Social Welfare course, leading to Master's degree has been introduced under the Department of Social Anthropology.

A one-year diploma course in Library Science has been instituted.

The School of Foreign Languages has started preparing candidates for a certificate course in French and German.

Kerala: The university, with the co-operation of the British Council and USIS, has started an Institute of English.

The university has approved a scheme for a degree course in Nursing and another scheme for a pre-degree course in Nursing. Admission to the degree course will be restricted to registered nurses who have passed the pre-university or Intermediate and have three years' experience in nursing.

Kurukshetra: The post-graduate Departments of History and Political Science started functioning in the new academic year.

The university has instituted a two-year pre-medical course.

The university has made the study of Sanskrit and Indian culture compulsory for all students.

Osmania: A post-graduate course in Psychology has been started from the current year, with an idea of starting two separate M.A. courses in Applied Psychology and Pure Psychology in due course.

Punjab: Punjab University plans to start at an early date post-graduate departments in basic medical sciences, namely, Anatomy, Physiology, Biochemistry, Biophysics, Pharmacology and Microbiology with the object of preparing teachers for medical colleges and research workers for medical institutes. The building for these departments is nearing completion.

A diploma course in Aeronautical Engineering has been instituted by the university with effect from the current academic year.

A five-year integrated course in Engineering will be introduced in the university with the admissions of 1963. The pre-engineering classes will continue for another year.

It has been decided by the Syndicate that a course leading to

the M.A. degree in Statistics be instituted.

"History of Art in India and South-East Asia" has been added as one of the options in Part II of the M.A. History course.

Rajasthan: A Department of Adult Education has recently been opened at Rajasthan University to meet the needs of those who are obliged to cut short their regular studies on account of various circumstances. The university feels that a liberal education programme of this kind could make a vital, though indirect, contribution towards the social and intellectual progress of the community.

Sri Venkateswara: A Department of Statistics has been instituted from the current academic year.

General Education forms one of the compulsory subjects of study both for the pre-university and the three-year degree classes.

A shortened B. Ed. degree course of 5 months' duration has been started in the Government Training College, Kutnool, for the benefit of the secondary grade trained teachers working in recognised schools.

Utkal: The post-graduate Department of Commerce started functioning from the current academic session.

A diploma course in Social Science Methodology has been instituted.

A five-year integrated course has been started in the University College of Engineering, Burla, from the current session.

One-year post-graduate diploma courses in English, History, Political Science, Economics, Mathematics, Chemistry and Physics have been started to prepare teachers for higher secondary schools in the State.

Evening Courses

Kerala: The university has agreed to the proposal of the State Government to start evening classes as an experimental measure in a few selected colleges under Government management.

Punjab: The university has discontinued evening classes for M. A. (Part I) from the current academic year; evening classes for M. A. (Part II) will be discontinued with effect from the next year.

Sri Venkateswara : Evening courses of two years' duration for the pre-university examination has been started in the Government Arts College, Anantpur, in addition to the V. R. College, Nellore, which has already been conducting evening courses.

Utkal : The university has started two units of evening colleges in the Ravenshaw College, Cuttack and the B. J. B. College, Bhubaneswar.

Correspondence Courses

Delhi : The university, through its Directorate of Correspondence Courses, instituted courses for the B. A. Pass degree in English, Hindi, History, Political Science, Economics, Commerce and Mathematics in September 1962. The duration of each course is 3 years for those who have passed the Intermediate and 4 years for those who have passed the higher secondary examination.

Admissions

Delhi : The wide gap between the number of students seeking admission to Delhi University colleges and the number actually admitted was measured recently through a system of registration. At the end it was found that out of the total number of 10,486 registered students, 7,547 succeeded in finding admission, while 2,939 could find no place in the local colleges for lack of accommodation and other facilities.

A 10-man committee, headed by Dr. C. D. Deshmukh, Vice-Chancellor of Delhi University, is considering a programme for the establishment of more colleges in Delhi and a second university campus which might eventually be made into a new university.

Kurukshetra : The university has stopped the admission of non-graduate Shastris to the M. A. Sanskrit course. The duration of the course has been reduced to two years.

Punjab : The Syndicate of the university has decided that a person placed in compartment at the B. A. examination of another university be not allowed to join the M. A. classes of the university, though students placed in compartment in the pre-university and I. A./I. Sc. examinations of other universities will be eligible for provisional admission to the pre-engineering or pre-medical classes and the second year of the three-year degree course respectively.

It has been decided by the Syndicate that a student who has passed the higher secondary or pre-university or Cambridge school examination of another university shall be eligible to join the pre-engineering course of the university, if he has passed in English and any three of the following subjects :

Physics, Chemistry, Biology, Geography, Mathematics, Physiology and Hygiene, and General Science.

The university has decided that students from States other than Punjab and Himachal Pradesh joining the B. T. or B. Ed. courses be exempted from the Simple Language Test in Punjabi with effect from the examinations of 1962.

SUBSCRIPTION NOTICE

University News is published once in two months. Annual subscription Rs. 3. Single copy: 50 p. p. postage. To ensure regular mailing, please send subscription of Rs. 2.50 in advance for the year 1963 with your correct postal address.

Editor, University News
c/o The Inter-University Board,
Rouse Avenue, New Delhi-1.

Examinations

U. P. Agricultural : Uttar Pradesh Agricultural University, Pantnagar, has an examination system under which curriculum in each college is divided into a number of courses, each with a fixed number of credits. Graduation is based upon the successful completion of a given number of "credit hours".

There are no external examinations. Internal examinations take the form of short quizzes in the class, hourly examinations, term papers, open-book examinations, and final examinations at the end of the trimester. If a student is to remain in the university he must maintain a certain "grade point" average, otherwise he is dropped from the university.

Mysore : Master's degree examinations in Engineering, Commerce and Law were conducted for the first time in July-October 1962.

Abolition of 3rd Class

Delhi : In compliance with the recommendation of the Committee on Reform of the Examination System, the Academic Council of Delhi University has agreed in principle not to award third class

in the M. A. or M. Sc. examinations. The implementation of the new decision would be considered by an expert working group appointed by the university.

Scholarships & Fellowships

Karnatak : The university has instituted three research scholarships each of the value of Rs. 200 p.m., tenable for two years, for meritorious students doing Ph. D.

The Ministry of Scientific Research and Cultural Affairs has allotted nine research training scholarships, each of the value of Rs. 250 p.m., tenable for three years.

Seven post-graduate students have received financial aid this year under the scheme of educational facilities to the children of political sufferers.

Kerala : The university has instituted a senior fellowship of the value of Rs. 500 p.m. in Marine Biology or Oceanography. Qualifications for eligibility: 1st or 2nd class M. Sc. in Zoology or Marine Biology with five years' research experience in problems connected with Marine Biology or Fisheries.

Two junior fellowships of the value of Rs. 300 p.m. each (one in Marine Biology and one in Oceanography) have also been instituted. Persons holding the above academic qualifications with three years' research experience are eligible for these fellowships.

The Syndicate has also granted two research fellowships of Rs. 250 p.m. each to staff members for study abroad.

Punjab : The university has decided to award 20 scholarships on the results of the pre-engineering and pre-medical examinations, and 20 scholarships each on the result of Part I and Part II of the three-year degree examinations.

Research & Publications

Bombay : The U.S. Department of Agriculture has approved a scheme of investigation in the Department of Chemical Technology, Bombay University, on "new solvents for molecular weight determination of cellulose by dispersive viscosity technique". The scheme is designed to obtain basic information on the degradation of cotton and thus permitting improvement of cotton products and greater utilization of cotton.

The Maharashtra State Industrial Research Committee has also sanctioned the following two schemes in the same department.

- (i) Studies in the production of gluconic acid.
- (ii) Pharmacological studies on vegetable drugs.

Jadavpur: The Department of Agriculture of the United States has sanctioned a grant of Rs. 2,92,000 to the university for research on the utilization of surplus sugar.

Karnatak: Under a scheme jointly financed by UGC and Karnatak University, work on the editing of Vachana literature commenced some time ago. It is the first attempt to edit on modern principles of textual criticism the voluminous Vachanas, which form an important contribution of the Veerashaives to Kannada literature. The entire Vachana literature will be published in 10 volumes, the first of which is nearly complete.

The university has undertaken the translation of *Shoonya Sampana* into English. This monumental work is often compared by scholars to Plato's *Republic*.

The university has agreed to implement the scheme of the Government of India to translate standard English books into Kannada. Twenty-two titles have been selected for the purpose.

The Department of Economics has undertaken surveys of the employment pattern of the alumni of the university for the period 1950-1960, and of the employment potential of community development.

The following low-priced booklets in Kannada, containing popular lectures delivered by university teachers in mofussil areas, have been published:

Basavannanavara Yojanagalu, 857 Kranti, and Manorogagalu 2nd Edn.).

The university publishes two journals—one each in Sciences and Humanities.

Kerala: The Pharmacognosy Department of the university has released for sale the fifth number of the Pharmacognosy of Ayurvedic drugs series relating to the nine drugs, Kapikacchu, Punarnava, bhukarni, Kshiravidari, Jambhu, iratitikah, Bala, Kadambah, aringarala.

K.S. Dharmabha: The university has started the publication of rare and important works in a series called Mahesha Thakur Sanskrit Series. The *Nvayaratnakara* of Mahamahopadhyaya Chandra of the Prabhakar School of Mimamsa is the first work which has been published.

The university has also taken up the publication of Tantrik literature. The *Mahakalamhita*, or the *Magnum Opus*, has been taken up as the first works under the scheme.

Marathwada: The Department of Marathi of the university is conducting a literary survey of Marathwada. So far 950 manuscripts have been collected, and the work of cataloguing these manuscripts is in progress. Of the 450 manuscripts already catalogued, 162 are in Marathi and the rest in Sanskrit.

Mysore: The Oriental Research Institute of the university has published two descriptive catalogues of Kannada manuscripts in its possession.

The Department of Publications (Prasanga) has published 16 booklets in the university extension lecture series and two in the textbook series. All the publications are in Kannada, excepting one in the textbook series, which is in English.

Utkal: The university has under compilation an encyclopaedia in Oriya language running into several volumes. A single-volume encyclopaedia is ready and is now under print.

The university has appointed a Paribhasha Committee with a view to preparing an Oriya vocabulary of English technical terms. The sub-committees dealing with Philosophy and Botany have completed their work. The work of the sub-committees on Medicine, Chemistry and Zoology is in progress.

The university has under compilation the History of Orissa. Of the four volumes proposed to be published two are almost complete.

University Bulletins

From the information received so far, we are glad to note that the following universities publish their news bulletins:

Jadavpur, Kerala, Osmania, Punjab, Rajasthan, Visva Bharati, and Rajasthan Agricultural Universities.

Philosophy Colloquium at India International Centre

A Philosophy colloquium was held in October at the India International Centre, New Delhi, to stimulate original philosophical thinking among the younger teachers of philosophy in Indian universities. The colloquium was held under the guidance of Prof. Max Black, Professor of Philosophy at Cornell University, and was inaugurated by Prof. Humayun Kahir, Union Minister for Scientific Research and Cultural Affairs.

Prof. Max Black, in his lecture on "The Uses of Logic", quipped that although Logic was not supposed to have advanced much since the time of Aristotle, logicians had become highly employable persons in modern life.

A similar seminar in History was held at the Centre from January 21 to 25. The Rockefeller Foundation of America has given grants to the Centre to carry out these projects.

Prof. Stevan's Lecture

Prof. Stevan Dedjir of the Institute of Theoretical Physics, University of Lund (Sweden) delivered a talk on "The Culture of Underdeveloped Countries and Science" at the Centre on December 22, 1962, in which he strongly advised the underdeveloped countries to develop science in their respective countries by their own efforts and not to depend on outside aid.

The India International Centre, the foundation stone of which was laid by H.E.H. the Crown Prince of Japan on November 30, 1960, and was inaugurated by Dr. S. Radhakrishnan on January 22, 1962, is now an active centre of cultural activities.

The Centre has worked in close collaboration with Indian universities, 29 of whom are its founder members. Many of the scholars invited so far by the Centre have paid prolonged visits to various universities for giving lectures and holding conferences and seminars. Representatives of member universities, while in Delhi, can stay at a concessional rate at the hostel of the India International Centre.

Universities in India

Name of University	Year of Establishment	Type	Total Enrolment (1961-62)	Enrolment in Professional Faculties (1961-62)	Enrolment in Postgraduate & Research (1961-62)	Vice-Chancellor	Registrar
*1. Bombay University	1857	F	52,090	8,598	3,389	Dr. V.R. Khanolkar	Shri T.V. Chidambaram
*2. Calcutta University	1857	A	1,14,817	12,493	5,294	Shri B. Malik	„ G.R. Chaudhuri
*3. Madras University	1857	A	60,185	13,582	2,250	Dr. A.L. Mudaliar	„ D.S. Mudaliar
*4. Allahabad University	1887	U	9,677	1,210	2,625	Dr. B. Prasad	„ O.P. Gupta
*5. Banaras Hindu University	1916	U	7,372	2,692	1,602	Shri N.H. Bhagwati	„ S.L. Dar
*6. Mysore University	1916	A	36,524	7,630	1,048	„ Mohamed Rahamathulla	„ K.S. Siddalingiah
*7. Patna University	1917	A	30,789	3,051	2,852	„ G. Jacob	„ K.P. Ambastha
*8. Osmania University, Hyderabad	1918	A	21,698	5,386	1,341	Dr. D.S. Reddi	„ B.P.R. Vihari
*9. Aligarh Muslim University	1921	U	5,042	1,706	866	Shri B.F.H.B. Tyabji	„ M.M. Siddiqi
*10. Lucknow University	1921	U	15,600	4,150	3,073	„ A.V. Rao	„ P.C. Mital
*11. Delhi University	1922	F	24,181	3,839	3,555	Dr. C.D. Deshmukh	„ T.P.S. Iyer
*12. Nagpur University	1923	A	29,017	5,117	1,608	Shri S.P. Kotval	„ M.S. Modak
*13. Andhra University, Waltair	1926	A	28,946	4,474	1,207	Dr. A.L. Narayan	„ K.V. Gopalaswami
*14. Agra University	1927	A	53,142	8,620	12,626	Shri P.D. Gupta	„ R.S. Agarwal
*15. Annamalai University	1929	U	3,326	1,341	419	Dr. C.P. Ramaswami Aiyar	„ T.D. Meenakshi-Sundaram
*16. Kerala University, Trivandrum	1937	A	50,544	8,248	1,357	Shri Samuel Mathai	„ A.M.N. Chakkaiar
*17. Utkal University, Bhubaneswar	1943	A	16,442	2,900	1,017	Dr. P. Parija	„ G.C. Rath
*18. Saugar University	1946	A	16,417	2,922	1,545	Shri G.B. Dhutt	„ Ishwar Chandra
*19. Punjab University, Chandigarh	1947	A	61,389	14,484	2,703	Dr. A.C. Joshi	„ Kirpal Singh Narang
*20. Rajasthan University, Jaipur	1947	A	33,587	6,344	2,942	Dr. Mohan Sinha Mehta	„ C.L. Singhal
*21. Gauhati University	1948	A	32,357	2,308	1,162	Shri H.J. Taylor	„ C. Dass
*22. Jammu & Kashmir University, Srinagar	1948	A	7,962	1,018	318	„ K.M. Panikkar	„ A.S. Dhar
*23. M.S. University of Baroda	1949	U	9,136	3,822	888	Dr. J.M. Mehta	„ B.K. Zutshi
*24. Gujarat University, Ahmedabad	1949	A	39,709	6,002	2,717	Shri L.R. Desai	„ K.C. Parikh
*25. Karnatak University, Dharwar	1949	A	15,191	4,012	931	Shri D.C. Pavate	„ S.S. Wodeyar
*26. Poona University	1949	A	33,461	5,158	1,604	Mahamahopadhyaya Datto Vaman Potdar	„ W.H. Golay
*27. Roorkee University	1949	U	1,757	1,710	107	Shri G. Pande	„ S.S. Sharma
*28. S.N.D.T. Women's University, Bombay	1951	A	3,253	69	254	Lady Premilla V. Thackersey	Smt. K.H. Bhansali

UNIVERSITIES IN INDIA (Continued)

Name of University	Year of Establishment	Type	Total Enrolment (1961-62)	Enrolment in Professional Faculties (1961-62)	Enrolment in Postgraduate & Research (1961-62)	Vice-Chancellor	Registrar
*29. Visva Bharati University, Shantiniketan	1951	U	823	74	198	Shri Sudbi Ranjan Das	Shri S.C. Sen
*30. Bihar University, Muzaffarpur	1952	A	27,595	1,711	1,247	Dr. P.L. Srivastava	„ P.R. Chowdhury
*31. Sri Venkateswara University, Tirupati	1954	A	9,342	2,092	347	Shri S. Govindarajulu	„ M. Ramanuja Rao Naidu
*32. Jadavpur University	1955	U	3,295	2,115	633	Dr. Triguna Sen	„ P.C.V. Malik
*33. Sardar Vallabhbhai Vidyapeeth, Vallabh Vidyanagar	1955	A	5,314	2,052	264	Shri M.D. Patel	„ H.A. Mistry
*34. Kurukshetra University	1956	U	551	135	87	„ Suraj Bhan	„ R.C. Khanna
35. Indira Kula Sangit Vishwavidyalaya, Kharigarh	1956	A	179	—	—	„ P.N. Chinchore	„ B.B. Biswas
*36. Gorakhpur University	1957	A	14,245	3,266	1,448	Dr. A.C. Chatterji	„ K.J. Majumdar
*37. Jabalpur University	1957	A	10,213	3,332	1,334	Shri V.R. Sen	„ S.C. Seth
*38. Vikram University, Ujjain	1957	A	24,485	6,311	3,147	Dr. G.L. Datta	„ V. Shankara
*39. Marathwada University, Aurangabad	1959	A	6,635	1,426	429	Shri S.R. Dongerkery	„ M.B. Chinis
40. Varanaseya Sanskrit Vishwavidyalaya	1958	A	942	—	461	„ S.N.M. Tripathi	—
41. Bhagalpur University	1960	A	20,698	852	481	Dr. B.R. Misra	„ A. Narayan
42. Burdwan University	1960	A	16,998	457	193	Shri B.K. Guha	„ S.M. Chatterjee
43. Ranchi University	1960	A	18,142	3,860	608	„ B.N. Singh	„ Jagatnandan Sahay
44. K.S. Darbhanga Sanskrit Vishwavidyalaya, Darbhanga	1960	A	6,752	—	594	„ Umesh Mishra	—
45. U.P. Agricultural University, Pantnagar	1960	U	415	415	—	„ K.A.P. Stevenson	„ N.K.A. Rao
46. Kalyani University	1961	U	342	305	38	„ S.N. Das Gupta	„ D.S. Sen
47. Agricultural University, Ludhiana	1961	A	—	—	—	„ P.N. Thapar	„ S.K. Misra
48. North Bengal University, Siliguri	1961	A	—	—	—	„ B.N. Das Gupta	—
49. Punjabi University Patiala	1961	U	—	—	—	„ Bhai Jodh Singh	„ Harbans Singh
50. Rabindra Bharati (Tagore University), Calcutta	1961	U	—	—	—	„ H. Banerjee	„ B.R. De
51. Magadh University, Bodhi Gaya	1962	A	—	—	—	„ K.K. Datta	„ K.P. Sinha
52. Jodhpur University	1962	A	—	—	—	„ B.N. Jha	—
53. Orissa University of Agriculture & Technology, Bhubaneswar	1962	U	—	—	—	„ M.C. Pradhan	„ N.R. Patnaik
54. Rajasthan Agricultural University, Udaipur	1962	U	—	—	—	„ G.B.K. Hooja	Dr. A. Rathore
55. Shivaji University, Kolhapur	1962	U	—	—	—	„ A.G. Pawar	Shri B.R. Dhekney

A=Affiliating.

F=Federal.

U=Unitary.

*Denotes membership of the Inter-University Board of India.

Technical Institutions' Expansion Planned

Since it has been decided to keep in abeyance the opening of any new institutions in view of the present national emergency, the All-India Council for Technical Education has drawn up a scheme to expand the admission capacity of existing engineering colleges by 3,000 seats and of polytechnics by 8,950.

An expert committee of the All-India Council for Technical Education has also formulated special three-year degree courses in Electronics, Instrumentation and Servo-mechanisms, Metallurgy, Aeronautics, and Chemical Engineering for those who have graduated in Science. It is proposed to initiate these courses at some selected centres in the country.

New Technical Colleges, Courses Approved

It is understood that the Chairman of the All-India Council for Technical Education has approved proposals for the following additional colleges, increased admissions and new courses of study in technical education:

College at Jalpaiguri (Bihar)—150 seats.

Government College at Gorakhpur—120 seats.

College at Vidisha (Madhya Pradesh) in the private sector—120 seats.

Engineering course at Govindram Saksharia Technological Institute, Indore—180 places.

Chemical Engineering course with an intake of 30 students at the Engineering College, Trichur.

Degree course in Architecture with an intake of 30 students at the Engineering College, Trivandrum.

Degree courses in Metallurgy and Chemical Engineering at Roorkee University.

Post-diploma courses in Automobile Engineering at the Guru Nanak Engineering College, Ludhiana, and the Government Polytechnic, Ambala.

Degree course in Metallurgy at the Regional Engineering College, Jaipur.

Specialised courses in Chemical Engineering and Metallurgy at the Regional Engineering College, Warrangal.

Specialised courses in Metallurgy, Mining and Architecture at the Regional Engineering College, Nagpur.

Specialised course in Chemical Engineering, Mining and Metallurgy at the Regional Engineering College, Srinagar.

Specialised course in Architecture at the Maulana Azad College of Technology, Bhopal.

Increase in admissions from 30 to 60 in the Department of Chemical Engineering, Punjab University.

Proposal of the Silk & Arts Mills Research Association, Bombay, to start a post-graduate course in the technology of silk and synthetic fabrics.

Steps to Accelerate Medical Education

In order to meet the demands of the national emergency and the long-term civil requirements, it is proposed to expand the capacity of existing medical colleges. Eleven out of the target of 18 new medical colleges have already been established during the Third Plan period.

The Indian Medical Council is understood to have approved a proposal that those colleges which have adequate facilities could raise their admission capacity to 200, thereby making it possible to secure 3,000 additional doctors every year.

At the second conference of Deans / Principals of Medical Colleges in India, held in New Delhi in November last, many other steps were suggested to accelerate medical education. Among the more important were:

(a) The abolition of pre-registration internship or housemanship in the case of those who volunteer for service in the Armed Forces. (In other words one year of service in the Army will be reckoned as equivalent to a year's house-surgery in a civil hospital.)

(b) Holding of three, instead of two, examinations in a year.

(c) Increase in the number of working days in a year by restricting holidays to six weeks in one calendar year.

(d) Shortening the period for the full course from five to four years by reducing the holidays to the minimum.

It is estimated that the deficiency of teachers in the existing medical colleges amounts to about 3,000 teachers (1,200 in clinical subjects and the rest in Basic Medical Sciences); in the ranks of specialists for district and taluk hospitals and in the private sector it is in the neighbourhood of 17,000.

Central Board of Secondary Education

The Central Board of Secondary Education, D.Lhi, as reconstituted by the Government of India, was inaugurated on July 1, by Dr. K.L. Shrimali, Union Minister of Education. As a consequence of this, both the Delhi Board of Higher Secondary Education and the Board of High School and Intermediate Education, Rajputana, have merged into the new Board.

The next annual higher secondary examination of the Board will commence on March 12, 1963.

Refresher Course for General Science Teachers Held

A three-week refresher course in General Science for teachers in secondary schools was held from November 1 to November 21 at the Vidya Bhawan Teachers College, Udaipur. The course was organised by the Department of Extension Services of the college, of which Mr. P.L. Shrimali is the Director, and necessary funds were made available by the University Grants Commission.

The course included lectures by eminent scientists invited for the purpose. Other activities included workshop practice, experiment designing and book introduction.

Women's Polytechnic

The Delhi Administration has established a tuition-free Women's Polytechnic in New Delhi for giving theoretical as well as practical training to women in arts and crafts. The first session started in September 1962. Subsequent sessions will, however, start in June every year.

The polytechnic offers diploma courses in Interior Decoration (3 years), Library Science (2 years), Commercial Art (3 years), Architectural Assistantship (3 years), Secretarial Practice (2 years), and Medical Laboratory Technology (2 years). The minimum qualification prescribed for admission is higher secondary for all courses, except Library Science, for which the minimum qualification is a university degree.

Of the 120 students on the rolls for the current session, 25% receive stipends.

Educational Publications

The Education Quarterly: The June issue was devoted mainly to the subject of textbooks. Articles included "Textbooks in Science" by Dr. B.D. Laroia and "Textbooks in American Education" by Francis Shoemaker. The September issue is a special Teachers' Number and includes a symposium on "I Chose Teaching", to which S. Nurul Hasan, Leila Kabir, Mina Swaminathan and Latika Sengupta have contributed. This number also includes a feature-series, "Silhouettes in Indian Education", to which contributions are made by M. Mujeeb, Kshitit Roy, "Jan", E. I. Shipstone and O. P. Bhatnagar.

In the context of the present national emergency, the Central Secretariat Library has suspended the publication of the following periodicals until further notice:

Current Administrative Literature, Current Educational Literature, Current Library Literature and Education Abroad.

Mathematics in Indian Universities—Report of the UGC Review Committee: In 1959, the University Grants Commission appointed Review Committees in a number of important subjects in Science, Humanities and Social Sciences to broadly survey and assess the standards of teaching and research, to examine the facilities available for the study of these subjects in Indian universities, and to make recommendations for further improvement in the general level of academic attainment and research in the subject concerned. The report of the Review Committee on Mathematics was published a couple of months ago. After giving a brief historical sketch of mathematical research in India, the report sets forth model syllabi for various university courses. This is followed by suggestions on the examination system and the lines of future development. A summary of the recommendations is given at the end.

History of Hindu Mathematics: The world's indebtedness to ancient Hindu mathematicians is well-known. A comprehensive treatment of the growth and development of Mathematics in India from the

earliest known times to the 17th century, is given in the book written by Bibhutibhusan Datta and Avadesh Narayan Singh (Asia Publishing House).

A Consolidated Glossary of Technical Terms (English-Hindi) is the outcome of ten years' of labour of the Board of Scientific Terminology appointed by the Government of India in 1950 for evolving and preparing scientific and technical terminology in Hindi and other regional languages. Available from the Manager of Publications.

The Journal of University Education: Published three times a year (September, December and March) by the Federation of Central Universities Teachers' Associations. The first issue, (September 1962) included articles by Mr. V.K. Gokak, on "The Universities and the Individual"; and "Planning of University Education" by Mr. K.L. Joshi, of the Planning Commission.

Higher Education in the United Kingdom: A handbook for students from overseas, published by the British Council and the Association of Universities of the British Commonwealth (September 1962) contains a directory of subjects, courses of study and places where facilities are available. Also indicates fees payable and entrance requirements.

University Study in Canada: A handbook for the guidance of foreign students, published by the Canadian Universities Foundation (June 1962) Immigration regulations applying to foreign students are outlined in a separate booklet published by the Canadian Department of Citizenship and Immigration.

Briefs

—A joint Technical Committee of the representatives of CSIR and the Indian Council of Agricultural Research has been constituted in order to bring a greater degree of co-ordination between the Central Indian Medicinal Plants Organisation and the Medicinal Plant Committee of the ICAR.

—The seven-day international symposium on Environmental Physiology and Psychology in Arid Conditions organised by Unesco at the Central Drug Research Institute,

Cheaper U.S. Textbooks

An Indo-American board is working on a scheme to sponsor cheap reprints of important American textbooks in India.

At present, most of the 15 titles published are in the areas of science and technology, including Physics, Chemistry, Geology and Engineering. More than 30 additional titles are being processed. More books on the Humanities will be included as the scheme develops. The objective of the scheme is to make textbooks available within the students' purchasing capacity. Generally, the cost is reduced to 30-35% of the original. The retail price thus ranges between Rs. 10 and Rs. 15.

One of the problems of the sponsors of the scheme is to find the best titles required for Indian students. For this, American and Indian educators are requested to forward their suggestions to the Ministry of Education or the U.S.I.S.

British Scheme

Since the British Government's low-priced books scheme was introduced at the beginning of 1961, more than 1,000,000 books have been produced for sale in Asian countries at one-third of their standard price.

The scheme makes available, usually as paper-backs, university textbooks and other selected works. Seventy separate titles have so far been published under the scheme, and 37 are in production.

Lucknow, concluded on December 13, 1962.

—The Central Food Technological Research Institute, Mysore, has decided to start a Regional Research Station attached to the Food Technology Division of Jadavpur University.

—The 16th session of the All-India Commerce Conference was held under the auspices of Mysore University from December 25 to 27, 1962.

—A short-term in-service training course in Educational Statistics was conducted from December 19 to 24, 1962 under the joint auspices of the Ministry of Education and Mysore University.

Foreign Scholarships—Sources of Information

A number of scholarships for study and training abroad are available for post-graduate students and teachers. A booklet published by the Ministry of Scientific Research & Cultural Affairs under the title *Scholarships for Study Abroad and at Home* gives adequate information for those interested. The scholarships for study abroad include those offered by the Government of India by foreign governments/organisations, and Commonwealth Scholarships and Fellowships.

During 1962-63, 28 countries offered scholarships to Indians for advanced study or training.

Apart from the scholarships available through the Ministry of SR & CA, certain educational agencies or Trusts offer some scholarships for training abroad. For instance, there is a Trust of the Birlas, a Trust of the Tatas, the Mahindra Educational Trust, and so on. Scholarships offered by these agencies are advertised from time to time. Similarly, certain foreign educational organisations administer some scholarships. For example, the United States Educational Foundation and the British Council. These scholarships are also given due publicity, and information in respect of them can be had from the regional offices of these organisations in New Delhi, Bombay, Calcutta and Madras.

Fulbright Programme

The programme of educational grants administered by the U.S. Educational Foundation in India is known as the Fulbright Programme. It is an exchange scheme, as offers made to Indian students are reciprocated by the Government of India by offering American students and teachers placements in Indian educational institutions.

The Fulbright Programme offers two kinds of grants: overall expenses (Smith Mundt Scholarships) and travel grants. Announcement regarding Smith-Mundt Scholarships is made in the Press annually in June or July, and the competition for travel grants is usually held in the first quarter of each year.

For information on scholarships offered by foreign universities,

reference may also be made to *Study Abroad* (UNESCO; annual), an international handbook listing fellowships, scholarships and schemes of educational exchange.

As regards detailed information on the availability of scholarships from British universities, a booklet listing post-graduate awards tenable in Britain from the academic year 1963-64 has been recently brought out by the Association of Universities of the British Commonwealth. Copies of this booklet have been distributed to all universities in India. The booklet, *United Kingdom Post-graduate Awards*, is printed periodically in accordance with a resolution of the 1948 Commonwealth Universities Congress recommending the preparation in each Commonwealth country of a list of post-graduate awards tenable at its universities for students from overseas.

Awards for Graduate Study and Research, 1961 (Dominion Bureau of Statistics, Ottawa; biennial), indicates awards open to persons from outside Canada. *The Handbook on International Study* (Institute of International Education, New York, 1961) contains, *inter alia*, lists of awards tenable in the U.S.A. for foreign graduates. *Higher Education and Research in Netherlands*, a quarterly bulletin of the Netherlands Universities Foundation for International Co-operation, contains a list of scholarships and fellowships for foreign students tenable in the Netherlands.

The next issue of this journal will carry a brief account of scholarships and fellowships awarded by the Ministry of SR&CA for technical studies and research.

Medical Firm's Fellowship

Dr. Samuel Devadatta, an assistant medical officer at the Madras Tuberculosis Centre, is one of six doctors to be awarded a Smith & Nephew Fellowship for 1963.

"But think of history," said former U.S. President Harry Truman, coming upon his wife burning his letters to her. "I have," said Mrs. Truman, continuing to toss letters on to the fire.

—Ellen Marc Smith

Nuffield Bursaries

Applications are invited for awards under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme from scientists of proven worth to enable them to pursue research in Natural Science in a Commonwealth country for periods of two to 12 months. Travel and maintenance grant is given at a rate depending on the living costs in the country concerned, on the basis of about £600 a year in Britain.

For visits during July-December 1963 applications must be submitted, complete with supporting documents, not later than March 15, 1963, to the Executive Secretary, the Royal Society, Burlington House, London, W.1., from whom application forms and fuller particulars may be obtained. A cyclostyled copy of the application form can be had from the Editor, *University News*.

\$1,000 Award

The Biomagnetic Research Foundation, Evanston, Illinois, will offer an award of 1,000 dollars for the development of a "classic" experiment demonstrating with simple means a biological effect of a static magnetic field. The best experiment will be chosen at the second Biomagnetic Symposium to be held at the College of Pharmacy, University of Illinois, Chicago, on November 29-30, 1963.

Law Fellowship

The British Institute of International and Comparative Law, has announced a research fellowship in Public International Law tenable by a non-British graduate in Law for one year. Value: £800 plus £200 as travelling allowance. Last date for applications: May 20, 1963.

Royal Society Medal

Among the nine presentations made in 1962 by the Royal Society of London, composed of eminent scientists from Britain and abroad, was a Royal Medal to Professor S. Chandrasekhar, now of the University of Chicago, for mathematical investigations into the stability of motion of real (viscous) fluids. Professor Chandrasekhar, who was educated in Madras and Cambridge, is the first Indian ever to be awarded the Royal Medal.

Visiting Professors Scheme

Britain's Royal Society and the Leverhulme Trust have announced the establishment of a scheme for the appointment of two visiting professors to India each year. Each professor will visit a university or research institution for a period of about four months.

The selection of professors will be made by the Royal Society, and the finance and administrative arrangements will be provided by the Leverhulme Trust Fund.

A committee has already been appointed in India to make recommendations as to which universities should be selected. Members of the committee are: Prof. M. S. Thacker, Member (Education) planning Commission; Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University; Dr. A.L. Mudaliar, Vice-Chancellor, Madras University; and Prof. Rustom Choksi, of the Tata Foundation.

It is planned that the first visiting professors will arrive in India in October 1963 and will work through February 1964. Thereafter two professors will arrive every October.

Indian Students In U.K.

India has the second largest number of overseas students studying in Britain—3,496, Nigeria, with 7,836, heads the list. Altogether some 40,000 students from Commonwealth countries are studying in Britain. After Nigeria and India come Ghana, with 3,348, and Jamaica, with 3,151.

Australian Students' Tour

A group of 60 Australian university students is in India, spending eight to 10 weeks of their long summer vacation as guests in Indian homes. The group, which includes 22 girls, are students representing nine Australian universities.

The trip has been organised by the Overseas Student Travel Scheme of the National Union of Australian University Students. This is the third time a group of Australian university students has undertaken this trip. In 1961, 20 Australian students spent their vacation in India.

The scheme will operate on a reciprocal basis. In June this year, a group of Indian students will spend their vacation as guests in Australian homes.



American Specialists

The following American specialists are scheduled to visit India during January-February, 1963:

Prof. Karl Deutsch, Professor of Political Science, Yale University.

Prof. S. Ochoa, Noble Laureate, Department of Biochemistry, New York University School of Medicine.

Prof. M. J. Buerger of Massachusetts Institute of Technology.

Prof. Frank Freidel, Department of History, Harvard University.

Dr. Milton E. Flower, Chairman, Department of Political Science, Dickinson College, Carlisle, Pennsylvania.

British Experts

Dr. Douglas Leggett, Principal of the Battersea College of Technology, London, arrived in Calcutta on January 12 to begin a 20-day study tour of Indian universities and technological institutes.

Prof. A.J.C. Wilson, Professor of Physics at the University College of South Wales, Cardiff, is in India for a three-week study and lecture tour.

Mr. John William Roger Griffiths, a British electronics expert, is shortly arriving in India to take up a two-year appointment at Calcutta University under the Technical Co-operation Scheme of the Colombo Plan. He may also, from time to time, lecture at Allahabad University.

Girish Karnad (centre), 24-year-old Rhodes scholar from India has been elected unopposed as President of the Oxford Union Debating Society. On the right is the outgoing President, Mike Barloff.

Indian VCs. To Be Honoured In U.K.

Dr. A. Lakshmanaswami Mudaliar, Vice-Chancellor of Madras University, will be presented with an honorary degree by London University next July, when he goes to attend the quinquennial congress of the Association of Universities of the British Commonwealth to be held in London in June.

Dr. C. D. Deshmukh, Vice-Chancellor of Delhi University, will be awarded an honorary degree by Lieccester University.

Student Leader's Foreign Study Tour

On the invitation of the British Council, the Government of France, and the Government of West Germany, Mr. G.A. Dharmarajan, Secretary, Madras University Students' Information Bureau, undertook a three months' study tour of university training establishments and institutions of higher education and research in the three countries from April to August 1962. During his study tour of German institutions, Col. B. H. Zaidi, Vice-Chancellor of Aligarh University, also joined him.

Inter-University Tournaments

Inter-University Tournaments in the following games have been held. The names of the winner and the runner-up are given against each tournament.

Tournament	Winner	Runner-up
	(M E N)	
Athletics	Punjab	Vikram
Gymnastics	Vikram	Osmania
Weight Lifting	Osmania	Mysore
Best Physique		
Class I	Madras	Lucknow
Class II	Osmania	Mysore
Class III	Jabalpur	Agra
Badminton	Allahabad	Bombay
Basketball	Madras	Punjab
Boxing	Bombay	Poona
Cricket	Poona	Bombay
Football	Jadavpur & Mysore Shared	
Hockey	Finals not yet played	
Kabaddi	Poona	Bombay
Kho-Kho	Poona	Gujarat
Swimming	Bombay	Cuttack
Table-Tennis	Jadavpur	Bombay
Tennis	Osmania	Delhi
Volleyball	Osmania	Vikram
Wrestling	Punjab	Punjab
Diving	Rajasthan	Bombay
Waterpolo	Bombay	Cuttack
	(W O M E N)	
Athletics	Vikram	Delhi
Badminton	Bombay	Punjab
Hockey	Punjab & Jabalpur Shared	
Kho-Kho	Poona	Gujarat
Tennis	Delhi	Mysore
Volleyball	Delhi	Punjab
Table Tennis	Bombay	Poona

The venues of some of the Inter-University Tournaments had to be changed, as certain organising universities could not take up the assignments on account of the national emergency. The venue for Table-Tennis Finals had to be changed from the University of Ceylon to Gujarat University because the Government could not release the necessary foreign exchange for the participating teams.

I.U. Sports Board

In addition to the promotion of sports in Indian Universities, the Inter-University Sports Board last year took up the responsibility of organising the National Physical Efficiency Drive in the universities. In September 1962, 18 universities sent their representatives to an orientation course organised by the Ministry of Education.

The following universities and institutions were admitted as new members of IUSB during 1962-63 :

Punjab University, Kurukshetra University, Jodhpur University, Magadh University, U.P. Agricultural University, Vidyakankar University, and the National Defence Academy, Khadakvasla.

Vacancies Under Unesco

Unesco has announced a number of vacancies for posts of experts under its Technical Assistance Programme. Some of the subjects in which specialists are required in various countries are :

Psychological Research (Bangkok); Educational Psychology (Bangkok); Educational Tests (Trinidad); Arid Zone Research (Israel, Baghdad); Educational Planning (Kuwait); University Science—Mathematics (Accra); Statistics (Salisbury); Applied Mathematics (Israel); Physics (Kabul); Scientific Documentation (Bangkok); and Civil Engineering (Lahore).

Detailed information about the background, qualifications, salary and allowances, and application forms can be obtained from the office of the Indian National Commission for Co-operation with Unesco, New Delhi.

Vacant University Posts

Jadavpur University has advertised the post of Professor of Electrical Engineering.

The University of Malaya invites applications for appointment to the Chairs of Agriculture, History and Malaya Studies.

Indian Navy Examination

An examination for admission to the Indian Navy as Special Entry Cadets will be held by UPSC, commencing on July 2, 1963. Eligibility: Intermediate. Age: 17-19 years. Last date for submission of applications: Feb. 11.

OUR REVISED ADVERTISEMENT RATES EFFECTIVE FROM NEXT ISSUE

Space	Per Insertion	For 4 Insertions
Full Page (16x24 cm.)	Rs. 300	Rs. 1,000
Half Page	Rs. 175	Rs. 600
Quarter Page	Rs. 100	Rs. 350
5.5 x 6 cm. space	Rs. 40	Rs. 140

PERSONNEL

Miss Padmaja Naidu, Governor of West Bengal, has assumed the office of President (Chancellor) of Jadavpur University for a term of four years with effect from October 25, 1962.

Dr. B.R. Misra, assumed charge as the officiating Vice-Chancellor Bhagalpur University on November 20, 1962 vice Mr. B.P. Jamar on leave.

Mr. B.F.H.B. Tyabji, took over as Vice-Chancellor of Aligarh Muslim University in the first week of October from Col. B.H. Zaidi, retired.

Mr. Suraj Bhan, took over as Vice-Chancellor of Kurukshetra University from Mr. Justice Tuk Chand of the Punjab High Court in July 1962.

Dr. C.P. Ramaswami Aiyar, has been appointed Vice-Chancellor of Annamalai University w.e.f. November 14, 1962.

Prof. Samuel Mathai, Secretary, University Grants Commission, has been appointed Vice-Chancellor of Kerala University in place of Dr. K.C.K.E. Raja who relinquished office on January 15.

Dr. A.C. Joshi, Vice-Chancellor of Punjab University, has been appointed a full member of the Committee of Science Teaching of the World Confederation of Organizations of the Teaching Profession.

Mr. C.L. Singhal, has assumed charge as Registrar of Rajasthan University with effect from July 1962.

Professor Geoffrey Nicolson Ostergaard, of Birmingham University, is teaching Political Science and Public Administration at Osmania University for the current academic year. His visit is sponsored by the British Council.

Dr. Eberhard Jackel, of Kiel University, is working as a Reader in the Punjab University History Department under the exchange of teachers scheme.

Dr. William H. Harlan, American visiting Professor, joined the Punjab University Sociology Department in mid-August for one academic year.

Dr. Kelsie Harder, Professor of American Literature in the University of Youngstown, Ohio, is a visiting Professor attached to Punjab and Kurukshetra Universities under the Fulbright Scheme.

Prof. D.B. Robinson and Dr. R.M. Reeser, of Ohio University, are working with the U.S. Aid Team at Rajasthan Agricultural University as Extension Adviser and Farm Management Adviser respectively.

Dr. Gilbert Fite, of Missouri University (U.S.A.), joined Jadavpur University as a visiting professor in August for one year. The American Government has undertaken to keep one visiting professor at this university for the next five years. Dr. Fite will teach American History at the university's Department of International Relations.

Dr. Range Willard, Associate Professors of Political Science, Georgia University (U.S.A.), is a visiting professor at Karnatak University under the Fulbright teacher exchange scheme.

Dr. Piara Singh Gill, Head of the Department of Physics, Aligarh University, and Director of Gulmarg Research Laboratory, has been appointed Director, Central Scientific Instruments Organisation.

Prof. Humayun Kabir, Union Minister for Scientific Research and Cultural Affairs, has been elected General President of the 31st session of the Indian Science Congress to be held in 1964.

Dr. Atmaram, Director of Central Institute of Glass & Ceramics, has been elected General Secretary of this Congress for a period of three years beginning February, 1963.

Dr. S. Dhawan, Professor of Aeronautics, assumed charge as Director of the Indian Institute of Science, Bangalore, on December 31, 1962.

Shri B.S. Kesavan, Librarian, National Library, Calcutta, has been appointed Director, Indian National Scientific Documentation Centre (INSDOC).

Dr. Badri Narayan Sharma, of the Indian Navy, has been appointed senior research associate in the Experimental Pathology Department of Birmingham University for a year.

DO YOU READ THE JOURNAL OF UNIVERSITY EDUCATION

(Published by the Federation of Central Universities Teachers' Associations.)

- * It is the only journal of its kind in India.
- * Each number contains articles, book reviews, communications and newsletters from universities.
- * It is a must for all teachers and all college and university libraries in the country.

Annual Subscription: Rs. 7

For details, please write to the Editor c/o Faculty of Arts, Delhi University, Delhi-6.

FOR QUALITY and RELIABILITY
Insist on

Toshniwal

Laboratory
Electronics
Engineering &
Industrial Instruments

Contact :

TOSHNIWAL BROTHERS PRIVATE LTD.,

198, Jamshedji Tata Road,
BOMBAY - 1.

Branches : Ajmer * Calcutta-1 * New Delhi-1 * Madras-2

Listen
to
**THE
VOICE
OF
AMERICA**

NEWS ★ FEATURES ★ MUSIC

<i>Time</i>	<i>Language</i>	<i>Metres</i>	<i>Kilocycles</i>
6:30-9 a.m.	<i>English</i>	25.35	11835
5:30-7 p.m.	„	42.19, 25.08, 19.46	7110, 11960, 15415
7:30-8 p.m.	„	42.19, 25.08, 19.46	7110, 11960, 15415
8:30-9 p.m.	„	19.46, 42.19	15415, 7110
8:45-9:30 p.m. 10-10:45 p.m.	„	25.21 "Music U.S.A."	11900 "Music U.S.A."
9:30-10 p.m.	„	25.21, 25.57, 42.19	11900, 11730, 7110
10:11-30 p.m.	„	42.19, 25.08, 19.46	7110, 11960, 15415
9:00-9:30 p.m.	<i>Hindi</i>	42.19, 25.08, 19.46	7110, 11960, 15415
7:00-7:30 p.m.	<i>Bengali</i>	42.19, 25.08, 19.46	7110, 11960, 15415
8:00-8:30 p.m.	<i>Tamil</i>	42.19	7110



LOW-PRICED EDITIONS
of American Textbooks for Indian Students
 (Subsidised Under PL 480 Programme)

Reprinted in India under arrangement with original publishers

By

ALLIED PACIFIC PRIVATE LTD.

Grant Social Building, 60 Sr. P. Mahta Road, Bombay-1.

		Reduced Price	Original Price
COLLEGE CHEMISTRY	by Linus Pauling	Rs. 12 50	Rs. 32 50
GENERAL CHEMISTRY	by Linus Pauling	Rs. 12 50	Rs. 35 00
STATISTICAL METHODS	by George W. Snedecor	Rs. 15 00	Rs. 37 50
MOTIVATION & MORALE IN INDUSTRY	by Morris S. Viteles	Rs. 12 50	Rs. 42 50
INTERNATIONAL LAW	by Charles G. Fenwick	Rs. 12 50	Rs. 35 00
KINETIC THEORY OF GASES	by Earle H. Kennard	Rs. 15 00	Rs. 47 50
PETROGRAPHY OF IGNEOUS ROCKS (Vol. I)	by Albert Johannsen	Rs. 10 00	Rs. 30 00
PETROGRAPHY OF IGNEOUS ROCKS (Vol. II)	by Albert Johannsen	Rs. 10 00	Rs. 45 00

*Announcement for other publications under the same scheme will be made
 in the next issue*

Distributed in India by :

ALLIED PUBLISHERS PRIVATE LTD.,
BOMBAY * DELHI * CALCUTTA * MADRAS

Store

Hilger Spectrographic, Analytical and X-ray Diffraction Apparatus.
 Marconi Communication Test Instruments.
 MSE High Speed Centrifuges and Electro-phoresis Apparatus.
 Edwards Coating Units, High Vacuum Pumping Systems and Freeze
 Dryers.
 English Electric Valves.
 Barlow-Whitney Humidity Test Cabinets.
 And Other Highly Specialised Equipment.

CONSULT:

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA)
PRIVATE LIMITED.

India House,
 Fort Street,
BOMBAY.

Sunlight Building,
 Asaf Ali Road,
NEW DELHI.

B5, Gillanders House,
 Post Box No. 2136,
CALCUTTA.

NEWS

Vol. I No. 2

April-May 1963

50 nP.

HOWSOEVER laudable an objective a new journal sets before itself, its worth is ultimately judged by the impact it creates on its readers. For this reason, when the first number of *University News* came out in February, we preferred not to think in terms of having accomplished anything extraordinary until the reaction of our readers became known. Now that a clear picture of the enthusiastic welcome the inaugural issue has received at all hands is available, it can be said with a fair amount of justification that the publication of this journal has fulfilled a longfelt need.

While it is particularly encouraging that the Vice-Chancellors of Indian universities have, on the whole, received the journal well, it is indeed gratifying to note that various other educational authorities and organisations, too, have found it interesting and useful. *University News* has also aroused considerable interest among the cultural attaches of foreign missions in New Delhi, many of whom have found in it an appropriate gift to be sent home to educational organisations interested in learning about educational developments taking place in this country.

A large number of our readers have written to us expressing their appreciation of the journal. We take the liberty of quoting just a few, in the hope that their views will be shared by most of our readers—

Prof. (Miss) R.N. Rose of the Regional Institute of Technology, Jamshedpur, writes: "I personally feel

it is a must for each and every college or institute... *University News* could be of immense help not only in supplying the necessary information but also in helping us to communicate with other colleges and Universities."

Shri N.A. Gore from Aurangabad: "...a bulletin packed from cover to cover with latest information on higher education in India."

Executive Secretary of the Royal Society, London: "I have read this with interest and will show it to my colleagues."

Head of the Information Service of the International Universities Bureau, Paris: "This is a most informative and useful document, and we shall much look forward to receiving future issues of it."

At the moment we would rather not hazard any prediction as to what place *University News* will occupy in the years to come in the broad movement towards the promotion and co-ordination of higher education in this country. It will all depend on our own resources and continued endeavour to shape the journal in accordance with the needs of our readers, as well as on the continued interest and cooperation *University News* will receive from various educational authorities and organisations. However, it is heartening to note that a good beginning has been made.

—Editor



A group photograph taken in Bombay on the occasion of the 38th Annual Meeting of IUB

Spotlight on I.U.B. Meeting

Vice-Chancellors Discuss Matters of Moment in Bombay

Vice-Chancellors of 36 Indian and one Ceylonese universities met in Bombay from February 7 to 9 to discuss various current problems facing the universities and institutions of higher learning. The occasion was the 38th annual meeting of the Inter-University Board of India.

The importance attached to this meeting is evident from the fact that apart from 38 Vice-Chancellors (out of 40 who were members of the Board), Shri Y.B. Chavan, Union Defence Minister; Maj.-Gen. Virendra Singh, Director-General of NCC; Dr. Sushila Nayar, Union Health Minister; Shri Shantilal Shah, Minister of Education, Maharashtra State; Dr. D.S. Kothari, Chairman of UGC; Shri P.N. Kripal, Education Secretary; Shri G.K. Chandramani, Joint Educational Adviser, Ministry of SR & CA; Dr. G.S. Mahajan, Member, UPSC; Dr. K.L. Joshi, Chief of Education Division, Planning Commission; and representatives of various other organisations participated in the deliberations. Representatives of the U.S. Education Foundation and the British Council were present as observers. The Chief Minister of Bombay attended the concluding

session which was addressed by Mr. Chavan.

The meeting was presided over by the outgoing President of the Board, Shri S. Govindarajulu, Vice-Chancellor, Sri Venkateswara University. SNDT Women's University further host to the delegates.

Shri Shantilal Shah, in his inaugural address, called upon the Vice-Chancellors of Indian universities to give urgent consideration to the problem of the medium of instruction, keeping in view the need for national integration. This question, he said, need not be examined according to the legal interpretation of the Constitution. Rather the Constitution was to meet the educational needs of the country and should be amended if found necessary.

Referring to the question of including university education in the Concurrent List of the Constitution—one of the items on the agenda—the State Education Minister said that such a step would widen the scope of conflict between the Centre and the States. (Later, the Board, after some discussion referred the question to its Standing Committee for further consideration.)

Shri S. Govindarajulu, in his presidential address, stressed the need to eliminate multiple control over universities by different statutory bodies, excepting through the University Grants Commission. Increasing control of statutory bodies over universities, he said, resulted in "an undesirable encroachment on the autonomy of the universities".

Referring to the question of the medium of instruction, he said that the medium should be bilingual—the regional language and English. An adequate knowledge of English was essential if it was to be used as the medium for pursuing post-graduate studies and research.

The three-language formula, he added, should be adopted "more sincerely and realistically". In non-Hindi areas the burden on the student should be limited to enable him to acquire that amount of knowledge of Hindi which was necessary.

Analysing the causes of indiscipline among students, he referred to their exploitation by "public men" and remarked: "The recent legislation making it criminal to advocate separation of any part of India, should be followed by a legislation which could punish anybody exploiting students."

Smt. Premila V. Thackersey, Vice-Chancellor of SNDT University, welcomed the guests and the members of the Board. Dr. P. Parija, Chairman of the Standing Committee of the Board, proposed a vote of thanks.

Dr. Triguna Sen

Dr. Triguna Sen, Rector, Jadavpur University, was elected President of the Inter-University Board for the year 1963-64.

Shri M.S. Mehta, Vice-Chancellor, Rajasthan University; and Shri Sudhi Ranjan Das, Vice-Chancellor, Visva-Bharati, were elected new members of the Standing Committee of the Board.

Next Meeting of I.U.B.

The Board accepted the invitation of Banaras Hindu University for holding its 39th annual meeting and the quinquennial conference at Varanasi.



Shri Govindarajulu delivering the presidential address. Seated beside him are (from left to right): Dr. P. Parija, Chairman of the Standing Committee of I.U.B.; Shri Shantilal Shah, Education Minister, Maharashtra State; and Smt. Thackersey Vice-Chancellor of SNDT University.

Compulsory N.C.C. Scheme Endorsed

One of the important decisions taken at the meeting of the Inter-University Board at its Bombay meeting was to make NCC training compulsory for all able-bodied under-graduate students (men only) from the next academic year.

At the concluding session, which was addressed by the Defence Minister, Shri Y.B. Chavan, and the Director-General of NCC, Major-General Virendra Singh, the Vice-Chancellors agreed to implement the compulsory military training scheme, which will cover about 7.5 lakh students upto the graduate level. For post-graduate students the training will be optional.

All new entrants will join the NCC Rifles in the first instance. After two years' training in the NCC Rifles, selected cadets will be taken for the third year in the NCC Senior Division. Those not selected will continue for their third year in the NCC Rifles. After the completion of the three-year training, further participation will be optional.

Object of Training

The NCC organisation, the Defence Minister explained, played an important part in finding officers for the Army. More than 50% of the officers commissioned in the Army had in some way been connected with NCC.

Shri Chavan reminded the members of the Inter-University Board that for a long time need was being felt for introducing in some form national service for university students. NCC suitably met this need. While it gave good preliminary training to those who wished to join the Army, it disciplined the way of life of others.

The Defence Minister pointed out that as the regular Army was being expanded and there was a general shortage of Army officers, it might not be possible immediately to make available from the Army all the officers NCC needs.

Major-General Virendra Singh mentioned 3,500 NCC Officers were to be trained by June this year for the implementation of the compulsory military training scheme. He urged the Vice-Chancellors to



The Defence Minister addressing the IUB meeting

make available sufficient number of professors and lecturers to undergo pre-commission training to be carried out at the Officers' Training School, Kamptee; the NCC Academy, Purandhar; and the eight Pre-commission Zonal Camps.

After the speeches of Shri Chavan and Maj.-Gen. Virendra Singh, a general discussion followed, at the conclusion of which the Vice-Chancellors passed the following resolution for the guidance of Indian universities :

(i) NCC training is to be compulsory. The compulsion is to be imposed by the rules of the university and legislation is not desired.

(ii) The compulsion will be for men under-graduates only for a period of 3 years, even though after this period, and for others, it would be available on a voluntary basis.

(iii) During the prescribed period of compulsory NCC training the grant of exemption for physical reasons should be rigidly controlled and perhaps kept in the hands of the highest authority in the university.

(iv) Indication of the academic achievement of students should be based only on academic achievement and should not be affected by other achievements. It is not necessary to add any marks to examination achievement in academic subjects because of NCC training or

special merit in it. It is, however, desirable to record in the university diploma, the grade obtained by the candidate in NCC, such as excellent, very good, etc., and also NCC achievements, such as B & C Certificates.

(v) The refreshment allowance for NCC cadets should be restored. It was stated that 11 State Governments had already agreed to do so. It is necessary that the remaining State Governments, also should agree to this.

(vi) During the period of compulsory training no student could be considered to have satisfactorily completed a year's academic course unless he attends during that year 75% of the parades. But this minimum of 75% attendance at parades should not lead to the belief that he could be absent for the remaining 25%. The general improvement of efficiency expected to be achieved through NCC training should aim at cadets putting in 100% attendance at parades, and the granting of leave should be by NCC officers who should keep the ideal of 100% attendance in mind. The medical certificate, either for complete exemption from NCC training or for leave, when needed, should be by the medical officer of the NCC or, at any rate, by a medical officer of the educational institution.

Students appearing in examinations after private study and women students are not included in the present compulsory scheme.

Union Health Minister Meets Vice Chancellors

Dr. Sushila Nayar, Union Health Minister, met the Vice-Chancellors assembled for the Inter-University Board's meeting on February 8.

The Board resolved that in view of the national emergency, candidates who had passed a final examination of M.B.B.S. should be awarded the degree on the completion of one-year housemanship in hospitals approved for this purpose and that the internship should be abolished. They also accepted Dr. Nayar's suggestion that in the case of doctors joining the defence services one year of service may be treated as equal to housemanship. The universities would give the degree on receiving a certificate from the defence service authorities that the medical student had completed one year with them.

Accelerating Supply of Engineers

Shri G.K. Chandiramani, Joint Educational Adviser to the Ministry of SR & CA, at the meeting of the Inter-University Board in Bombay, recommended to the Vice-Chancellors, for favourable consideration, the suggestions of the All-India Council for Technical Education for accelerating and augmenting the supply of Engineering degree-holders in order to meet the needs of the present emergency.

The suggestions were that the universities should endeavour to shorten the Engineering course by (a) making the final year students go through an accelerated course, (b) cutting summer vacations and holidays, (c) holding practical examinations before the written examination, and (d) expediting the submission of results by examiners, if necessary by modifying and simplifying the examination system itself. Other suggestions related to the holding of two examinations in a year for final year students and separate three-year courses for students who have already passed the Bachelor's degree in Science.

These suggestions were generally commended by the Vice-Chancellors and the universities were asked to give them due consideration.

N.I.C. Resolution on Language Ratified.

The decision of the Vice-Chancellors' Conference, held in October last year, in regard to the medium of instruction was ratified at the Inter-University Board's Bombay meeting.

The Vice-Chancellors' Conference had, in turn, endorsed the decision of the National Integration Council, which stated that though the replacement of English as the teaching medium was inevitable, the transition should be made without jeopardising the standard of education and only after careful preparation of textbooks, teachers and additional reading material in the alternative languages. The Council also laid stress on the importance of teaching English as a compulsory subject even after the changeover to regional languages and on improving the standard of both English and Hindi in Indian universities.

The resolution sponsored by the Standing Committee of the Board, which met a day before the general body meeting started, stated: "If any university desires to introduce as the medium of instruction any of the regional languages mentioned in the Constitution of India, provision should be made for the same simultaneously in English or any Indian languages." The contents of this resolution were approved by the Board.

Rural Services Diploma

The Inter-University Board took up the question of the recognition of the Rural Services diploma course as equivalent to the first degree of a university. It was decided that candidates holding the diploma may be considered eligible (for the next five years) for admission to the Master's degree courses in Economics, Sociology, History, Political Science and similar other subjects in the Humanities.

Sabbatical Leave for teachers

The Board recommended that sabbatical leave should be allowed to all categories of universities' staff, including lecturers. The Board also called upon the Ministry of Education and the universities to contribute towards a central fund for the institution of travelling fellowships for teachers.

Reservation of Seats

With a view to encourage national integration at university level, the Board recommended that admissions should be made on merit only and in courses where the Central Government had given cent per cent grants an "appreciable" number of seats might be reserved for qualified students from outside the university, while in all other cases 10% seats should be reserved for outside students on a reciprocal basis.

New Members of I.U.B.

The Universities of Vidyalkankara (Ceylon), Burdwan (West Bengal), and U.P. Agricultural University, Pantnagar (U.P.), were admitted new members of the Inter-University Board of India at its 38th annual meeting. The latter two universities will be members of the Board for a period of five years only in the first instance. Thirty-eight Indian universities and one Ceylon university were already members of the Board. The membership of the Board now stands at 42.

The Board also admitted the Indian Agricultural Research Institute, New Delhi, as its first associate member.

On the applications for membership from Ranchi, Bhagalpur and Magadh (Gaya) Universities, the Board resolved:

"that the Inter-University Board finds that there are certain features in the Act of the Bihar Universities which do not appear to be conducive to the efficient development of proper academic atmosphere. In the circumstances, the Board would like to watch the working of the Universities of Ranchi, Bhagalpur and Magadh for some more years before admitting them to the membership of the Board".

Applications of Punjabi University, Jochpur University, Rajasthan Agricultural University, and Varanaseya Sanskrit Vishwa-vidyalaya are under consideration and will be taken up at the next meeting of the Board, by which time these universities would be able to satisfy the condition that they are more than one year old.

Tidings and Trends

MPs' Committee Favours Uniform Pattern of Education

The Informal Consultative Committee of MPs attached to the Ministry of Education, at a meeting in New Delhi on March 6, discussed at length various aspects of declaring education a concurrent subject.

The consensus of opinion was that the Central Government should be enabled to exercise its powers and responsibilities more effectively in the matter of higher education in the country. Both from the point of view of standards and practicability it was thought desirable to have a uniform pattern of higher education. It was desirable also from the broader point of view of the country's unity and integrity.

Dr. K. L. Shrimali, Union Minister of Education and Chairman of the Committee, announced that a sub-committee would soon be appointed to examine the constitutional provisions relating to the co-ordination and determination of standards in institutions of higher education or research. This, he said, was being done to examine all aspects of the question and recommend, if necessary, the amendment of the present Constitutional provisions.

University Grants Under Stringent Review

The University Grants Commission proposes to adopt the procedure of recalling the grants made to universities if these are not utilised for specified purposes within the stipulated time. The audit reports on the accounts of UGC for the period from 1958-59 to 1961-62, placed before the Lok Sabha on March 13, brought out instances of delays on the part of certain universities in the utilisation of grants made to them.

In 1961, 16 universities received grants amounting to Rs. 28.31 lakhs for the establishment of Tagore Chairs, and the directions were that the grants should be invested in fixed deposits with the State Bank. The audit report pointed out that no records were available to indicate that the universities had invested

these grants and that the interest earned from them was being spent for the purpose for which the endowments were created.

In U. P. recently, the State Education Minister confirmed that the U. P. University Inquiry Commission had found irregularities in the expenditure incurred by the Universities of Agra, Lucknow, Allahabad, Gorakhpur and the Sanskrit University, Varanasi. He said the State Government proposed to appoint financial advisers to these universities to prevent recurrence of such financial irregularities.

Cut in Education Budget

A reduction of Rs. 2.20 crores has been made in the current financial year in view of the national emergency, said Dr. K. L. Shrimali, Minister of Education, in the Lok Sabha on February 20. The Minister added that the reduction had resulted in the curtailment or postponement of some activities of the Government-aided institutions but the cuts were not likely to affect essential programmes.

Grants for Evening Colleges

The Government of India is considering steps to implement the recommendations of the Expert Committee on Evening Colleges. A scheme is being prepared on the basis of the recommendations to give grants to those colleges and universities which are willing to start evening classes or colleges.

Free Education for Children of Jawans

Since the declaration of the present emergency, the Government of India has made education free in the various Union Territories for the children of the service personnel and all those persons who were killed or disabled while in action on the front.

This facility is available in institutions which are run or aided by government or local bodies, up to the collegiate standard. The same concession has been agreed to be provided by the four central

universities as well. The Government of India has advised the State Governments also to provide similar facilities.

University not Industry

The Supreme Court on April 1 ruled that educational institutions do not fall within the definition of "industry" under the Industrial Disputes Act, 1947.

The judgement was delivered on an appeal filed jointly by Delhi University and Miranda House (a university college for women) challenging the validity of the orders of the Industrial Tribunal that they must pay retrenchment compensation to two of their employees in accordance with the provisions of the Industrial Disputes Act. The appellants' objection was that the work carried on by the university was not an "industry" under the Act.

Following the appeal, the Supreme Court held that it could not have been the policy of the Act that education should be treated as an industry, and therefore the employees of educational institutions were not entitled to obtain adjudication of their disputes with the institutions under the provisions of the Act.

180 Days of Work

Forty-four universities have accepted the proposal to have 180 or more working days in a year, exclusive of examination days. This was stated by Dr. K. L. Shrimali, Union Minister of Education, in the Rajya Sabha on January 24.

Three-year Degree Course

The State Universities of Uttar Pradesh, namely, Agra, Allahabad, Gorakhpur and Lucknow, and the University of Bombay in Maharashtra have not yet agreed to the introduction of the three-year degree course. This was stated by Dr. K. L. Shrimali in the Rajya Sabha on February 28.

U.G.C. Office Shifts

The Office of the University Grants Commission has shifted to its newly constructed building at Mathura Road, near Harding Bridge, New Delhi.

Dr. Deshmukh's Foreign Tour

Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University, accompanied by his wife, Mrs. Durgabai Deshmukh, is scheduled to leave Delhi on May 23 on a two-month tour of Britain and America. During the first leg of their British tour from May 25 to June 30, they will visit the National Institute of Social Work Training, London; the University College of Swansea; and the Universities of Reading, Oxford and Cambridge. At Cambridge University Dr. Deshmukh will deliver the Smuts Memorial Lecture.

In America, the Deshmukhs will attend the World Food Congress in Washington from June 4 to 18. Dr. Deshmukh will participate in the Congress as a member of the Preparatory Committee of FAO and Mrs. Deshmukh will read a paper on training of nutrition personnel. Their other engagements in America include visits to the Universities of Princeton, Pennsylvania and Harvard.

During the second part of their British tour, Dr. Deshmukh will receive an honorary degree of Doctor of Laws from the University of Leicester on July 12.

Dr. Laroia Attends Bandung Meeting

Dr. B.D. Laroia, Secretary, Inter-University Board of India, attended as an observer the fourth general conference of the Association of South-east Asian Institutions of Higher Learning (ASAHL) held at Bandung from April 16 to 18. The Association has a membership of 27 universities from eight Southeast Asian countries.

This was the first occasion on which an Indian representative was invited to attend the conference as an observer.

Uniform Pay Scales for Teachers

The All-India Federation of University and College Teachers' Organisations, at its two-day session in Calcutta from February 24 to 25, demanded uniform scales of pay and conditions of service for all teaching staff in the universities and colleges in the country. In another resolution, the federation urged the formation of grants commissions on State level.

Regional Colleges of Education

To meet the shortage of qualified teachers for the various streams of higher secondary and multipurpose schools, four Regional Colleges of Education are being set up by the National Council of Educational Research and Training. The Colleges will start functioning from July 1963 at Ajmer, Bhopal, Bhubaneswar and Mysore. The project is being assisted by the U.S. Agency for International Development which will provide technical assistance in the form of educational consultants, equipment totalling \$ 300,000, and training for 20 teachers at the Ohio State University.

Research Methodology

The National Council of Educational Research and Training has organised a nine-month training course in Research Methodology commencing in March 1963. The object of this course—the first of its kind—is to build up a corps of research workers in the field of education which would be available for the research projects of the Council and the studies and investigations taken up by the universities and teacher-training colleges.

● The National Council of Educational Research and Training has sanctioned a grant of Rs. 10,000 for a curriculum research study in Home Science offered at the Lady Irwin College, New Delhi. The findings of the project "An evaluation of the Home Science Curriculum at the Lady Irwin College" may help in further improving the Home Science programme at the college level in India.

● It is understood that the committee appointed by the Ministry of Education for preparing a model Act for all Indian universities has almost completed its work and is preparing its report for submission to the Ministry.

● The Governor of Uttar Pradesh has called a conference of the Vice-Chancellors of U.P. universities in the third week of May at Naini Tal "to give serious thought to the problem of women's education".

● A rural institute for women will start functioning in Indore from July. The main object of the institute is to provide higher education to women from rural regions.

Centres of Advanced Studies

To concentrate resources on raising standards of teaching and research in Indian universities it has been decided to establish, for some selected subjects, "Centres of Advanced Studies" in those university departments where good work is already being done.

Each centre will have a team of professors, readers, and research associates of outstanding ability and qualifications, actively engaged in research and advanced teaching. This combination of research and advanced teaching, providing contact with fresh young minds, is expected to generate a proper climate for serious and sustained academic work.

A substantial proportion of the staff will be "floating" personnel, coming to these centres for long or short periods on deputation from other universities, and possibly from abroad, thus encouraging movement of senior teachers and scholars from one region to another and strengthening the corporate intellectual life of the country.

The centres will be parts of the universities where they will be established, but will have enough autonomy for their smooth internal working and effective performance on an all-India basis. Wherever possible, they will work in close collaboration with the National Laboratories of the Council of Scientific and Industrial Research.

Unesco Grant

During the third Plan period, 20 such centres are to be set up, 10 of which will receive grants from Unesco to the tune of \$ 887,000 during the next six years in the form of equipment and Russian experts. In addition to this assistance, UGC is expected to make a contribution of Rs. 1.3 crores to meet the expenditure on buildings, equipment, books and recurring items. The following departments will be assisted by Unesco in 1963-64:

Calcutta and Jadavpur Universities—Centres for Applied Mathematics.

Osmania University — Centre for Geology & Geophysics.

Delhi University—Departments of Physics and Chemistry.

Madras University—Departments of Botany and Physics.

During 1965-66 the following additional centres will receive assistance:

Delhi University—Department of Botany.

Osmania University—Department of Chemistry.

Bombay University—Institute of Chemical Technology.

Institute of Economic Growth Inaugurated

The formal inauguration of the Institute of Economic Growth, Delhi, and the dedication of its Sri Ramakrishna Hall was performed by Dr. Zakir Husain, Vice-President of India, on February 25, 1963.

The Institute of Economic Growth was euvred out of the Delhi School of Economics in May 1958, when it was felt that the School should restrict itself to functioning as the Department of Economics of Delhi University and that part of its activities which constituted the all-India centre should be transferred to a distinct unit.

The Ford Foundation have, in addition to a large initial grant, sponsored and financed the course in Research Methodology, which is conducted twice a year (from January to May and from August to December). The support of UGC has now been promised for this course. About 20 candidates with Master's degree are admitted to each term of the course, and normally six scholarships are given to selected candidates who are not sponsored by any institution. Unesco proposes to establish shortly five fellowships in Research Methodology for the benefit of students from the neighbouring countries of South-East Asia.

The Institute is providing, for a limited number of persons, facilities for research work for the Ph.D. degree of Delhi University. Since October 1962, it has also been operating a course in Econometrics

and Mathematical Economics, primarily for teachers and research workers of the university.

In the very near future, the Institute expects to start post-M.A. diploma courses of one year's duration in Demography, Agricultural Development and Techniques of Planning—subjects in which the Institute has some special competence.

The backbone of the Institute, however, is its research work. The Ministry of Health have been providing support for a research section in Rural Demography since 1958 and have recently provided additional grant for a section in Urban Demography. Since 1961-62, the Ministry of Commerce and Industry have been supporting a research section in Industrial Development and the Ministry of Food and Agriculture a research section in Agricultural Development. The Ford Foundation have made a new grant for a research section in Planning and Development for a period of four years, which includes a substantial provision for getting foreign experts.

The Institute offers a number of post-doctoral fellowships, usually to university and college lecturers of some standing and experience or to research workers with experience in Government or research organisations. These fellowships are normally for a period of one year.

Parapsychology Centre Proposed

It is understood that a scheme for the establishment of a research centre in Parapsychology has been put forward by Dr. J.G. Pratt, Assistant Director, Parapsychology Laboratory, Duke University (U.S.A.), and Dr. K. Ramakrishna Rao of the same Laboratory, who visited India early this year. The pattern proposed for this research centre is on the lines generally approved by UGC for the "Centres for Advanced Studies". The two visiting experts have, in their scheme, suggested that the proposed centre should be a part of one of the older universities which have facilities for research in social, biological and physical sciences.

Madras Institute of Mathematics

The first anniversary of the Institute of Mathematical Sciences, Madras, was celebrated on January 14, 1963 in the presence of the Visiting Professors R.E. Marshak, of the University of Rochester, and N. Fukuda, of Japan.

Two professorships entitled "Niels Bohr Professorship" and "Ramanujam Visiting Professorship"



Prof. Marshak unveiling the portrait of the eminent Indian mathematician Ramanujam on the occasion of the first anniversary of the Institute of Mathematical Sciences.

were announced on the occasion. Professor R.E. Marshak became the first Niels Bohr Visiting Professor for the year 1963. He has already given a series of 15 lectures on the Theory of Weak Interactions at the Institute.

The Institute of Mathematical Sciences was set up by the Government of Madras in January 1962 for original investigations in fundamental sciences in general and in Mathematics, Applied Mathematics, Theoretical Physics and Astrophysics in particular. Prof. S. Chandrasekhar, now at the University of Chicago, is the Honorary Professor of Astrophysics, and Prof. Atladi Ramakrishnan (Director of the Institute) is the Professor of Theoretical Physics. About a dozen scholars are working for Ph.D. under various members of the academic staff.

Agricultural Research Institute

The Indian Agricultural Research Institute, New Delhi, which has been recognised as one of the institutes "deemed to be universities" under section 3 of the UGC Act of 1956, is the first non-statutory institution to be admitted as an associate member of the Inter-University Board of India.

The Post-graduate School of the Institute, which provides training in the various fields of Agricultural Science, leading to the award of Ph.D. and M.Sc., was established in October 1954, and IARI has been functioning as a university since then. Earlier, a two-year training in the Institute leading to the diploma of Associateship of the Institute was established.

Departments of Study

The Institute has 13 Divisions. At present M.Sc. and Ph.D. courses are being organised in Agronomy, Agricultural Economics, Agricultural Extension, Agricultural Botany, Horticulture, Entomology, Mycology & Plant Pathology, Soil Science, and Agricultural Chemistry. The Divisions of Agricultural Engineering, Agricultural Physics and Plant Introduction are not yet full-fledged degree-granting departments.

The academic session of the Post-Graduate School commences in October and each year approximately 150 students are admitted to the M.Sc. and Ph.D. courses. Residence in the hostels attached to the Institute is compulsory. Unlike in the other Indian universities, classes or divisions are not awarded, but the final performance is judged from the over-all grade-point average secured by the student.

The Institute's Central Library is considered to be one of the best agricultural libraries in the East. Extensive farm area; excellent Sahiwal herd of milch cows; a comprehensive collection of crop plants, insects, fungi, bacteria and viruses; a cartographic laboratory; and facilities for agricultural research through electro-microscope and radio-isotopes are other distinctive features of the Institute.

SCIENCE & TECHNOLOGY

Expansion of Technical Education

Shri Humayun Kabir, Union Minister for Scientific Research and Cultural Affairs, outlined in the Lok Sabha on January 23 the proposals under consideration to increase the output of engineers and technicians from the existing institutions. The following are the proposals:

(i) To increase admissions in existing institutions by 3,000 for the first degree courses and by 9,000 for diploma courses.

(ii) To organise a special two-year diploma course for technicians at selected centres.

(iii) To organise part-time diploma courses at about 25 centres, each with 100 admissions.

(iv) To institute special three-year degree courses in Engineering for Science graduates.

(v) To accelerate, at selected institutions, the training of the students now studying in the third and final years of degree courses.

(vi) To organise a special degree or equivalent course for diploma-holders.

Graduate Architects in India

With the steadily increasing demand for architects in India, the number of institutions offering Architecture at the degree level has increased from 3 in 1952 to 8 in 1961, states the February 1963 issue of *Technical Manpower*, a monthly bulletin issued by the National Register Unit of CSIR.

The number of graduate architects turned out each year increased from 4 in 1952 to 18 in 1956, going up to 106 in 1959, and finally reaching an all-time high of 137 in 1961. The National Register of Scientific and Technical Personnel shows a total of 641 graduate architects residents in India and 18 presently abroad.

Scientists' Pool

Particulars of 110 persons who have recently been selected to the Scientists' Pool of the Council of Scientific & Industrial Research for temporary placements as scientists, technologists, engineers and medical spe-

cialists, are given in a special "Pool Supplement" to *Technical Manpower*.

The Pool officers are attached to Government Departments, State industrial enterprises, National Laboratories or scientific institutions, or given some other work depending on the requirements and their qualifications and experience. They are paid salaries by CSIR generally between Rs. 4.0 and Rs. 700 per month (exceeding Rs. 700 in exceptional cases), as recommended by UPSC, till they secure permanent posts or are seconded to any other organization.

Scientific Research and Defence

A seven-member Steering Committee headed by the Director-General of CSIR has been set up to act as the focal point of reference on scientific and technical problems of defence in which the National Laboratories could assist. The first meeting of the Committee was held in New Delhi on January 29, 1963. It was decided to create defence cells in the Central Electrochemical Research Institute, Karaikudi; the National Physical Laboratory, New Delhi; and the National Metallurgical Laboratory, Jamshedpur.

N.P.L. to be Reorganised

Research Work in the National Physical Laboratory, may be reorganised in the light of the report made by Professor P.M.S. Blackett to the Government of India.

Professor Blackett, who made a study on the working of the various research departments of NPL recently, is understood to have suggested that research should be undertaken project-wise and preference given to short-term schemes. It learnt that Prof. Blackett has also advised the bifurcation of the Laboratory into two units, one relating to basic and fundamental research and the other to applied research.

Biophysics Division at CLRI

A new Biophysics Division was formally declared open on February 1 at the Central Leather Research Institute, Madras. An electron microscope with magnification of 200,000 times has been acquired by this Division.

Marine Biological Institute

It is reported that the Government of Gujarat has decided to set up a Marine Biological Research Institute at Okha during the third Plan period. The institute, which is estimated to cost Rs. 35 lakhs, is likely to receive grants from Unesco as well. The Fisheries Department, which is expected to be ready by 1964, has already received substantial equipment.

High Altitude Research

The Governing Body of CSIR, at its meeting in New Delhi on March 23 and 24, approved a proposal to constitute a committee to serve as the focal point of thought on scientific problems concerning high altitudes and the Himalayan region. The committee will be headed by the Director-General of CSIR and will include, amongst others, the Minister of Defence; Dr. D.N. Wadia; Directors-General of the Meteorological Department, the Survey of India and the Geological Survey of India; and Directors of the Botanical Survey of India and the Zoological Survey of India.

Science Talent Search

The National Council of Educational Research and Training is implementing a programme of "Science Talent Search" as a pilot project in Delhi Territory during the current year. The object of the project is to discover science talent among pupils as early as possible and help the talent so located to develop into a scientific mind. Any student studying in the final year of a recognised higher secondary or multipurpose school, who is certified by his teacher as above average in Science and/or Mathematics can enter the contest.

The first Science Talent Search will be held in April 1963 and will finish in a day of two sessions. On the result of a written test, a suitable number of competitors will be called for interview. Winners will be awarded scholarships at the rate of Rs. 50 in the first year, Rs. 75 p.m. in the 2nd year and Rs. 75 p.m. in the 3rd year—provided they join a Science course in the university. Each recipient of the scholarship will also receive a basic unit of Science books and appliances costing about Rs. 100 during each year of his study.

Radiological Physics Course

The Atomic Energy Establishment, Trombay, has decided to make the one-year course in Radiological Physics, started in April 1962, an annual affair. The Establishment's Health Division is already conducting short-term courses, lasting four to six months, in the safety aspects of medical and industrial uses of radiation. These courses are open to doctors, physicists, industrial engineers and research workers.

The Training School, started in August 1957, every year trains about 150 young Science and Engineering graduates from various Indian universities in specialised fields of Nuclear Science and Engineering. The one-year course provides orientation in Physics, Chemistry, Engineering and Metallurgy.

Geomorphological Studies

A South Asian Regional Introductory Course in Geomorphological Studies, with special reference to arid lands, will be organised by the Unesco South Asia Science Co-operation Office, New Delhi, in collaboration with the Government of Pakistan. The course will be held at the Geophysical Institute, Quetta, from May 20 to June 8, 1963. Further particulars can be had from the Unesco Office, 100 Sundar Nagar, New Delhi.

Hydraulic Engineering

The seventh International Course in Hydraulic Engineering will be held from October 17, 1963 to September 11, 1964 at Delft (Netherlands). This course is organized by the Technological University of Delft in collaboration with the Netherlands Universities Foundation for International Co-operation.

The course is intended for graduates in Civil and Hydraulic Engineering with practical experience. The programme comprises: Tidal & Coastal Engineering, Rivers and Navigation Works, Reclamation, Theoretical and Experimental Hydraulics, Foundation Engineering and Hydrology. The medium of instruction will be English. The closing date for applications is July 31, 1963. Further particulars may be obtained from the Netherlands Embassy in New Delhi.

MEDICAL EDUCATION

Steps for Quicker and Larger Out-turn of Doctors

In a circular letter sent to all medical colleges in the country, the Medical Council of India is understood to have set forth steps to expand and accelerate medical education to meet the shortage of doctors in the country in general and to meet the needs of the national emergency in particular. The steps recommended are:

- (i) Curtailment of the duration of the MBBS course to four-and-a-half years.
- (ii) Substitution of the one-year internship by one-year housemanship as a pre-requisite condition for full registration.
- (iii) Provisional registration of medical graduates joining the Armed Forces and adjustment of their one-year service in the Army with the one-year of housemanship in the case of others for purposes of granting full registration.
- (iv) Holding of supplementary examinations quarterly to allow failed students the earliest possible chance to get through.
- (v) Increase in the number of admissions to 200 in the fully developed medical colleges.

Medical Centre at Baroda

Edinburgh University, the World Health Organization and the State of Gujarat are combining in an experiment to develop a strong Medical Centre at the Medical School of Baroda University. Under the project, six teachers are to be made available by Edinburgh University for a period of six years. The first group of five doctors will be arriving in India for the academic year beginning in June 1963.

● The Ministry of Health's proposal to abolish integrated courses in medicine will, if implemented, affect about 50,000 medical graduates. This was stated by a representative of the National Medical Association of India in New Delhi recently. He said in India there were about 150 colleges providing integrated courses in ancient and modern systems of medicine.

Campus Notes

UNIVERSITIES

New Members of I.U.B.

Vidyalankara University, Kelaniya (Ceylon), situated in a suburb six miles from Colombo, is a statutory and multi-faculty university and has been in existence for over three years. It makes no distinction of caste or creed for admission purposes and its statutes and regulations are similar to those of the University of Ceylon, Peradeniya, which is already a member of the Inter-University Board of India. The medium of instruction in the university is Sinhalese, but English is being taught as a second language to all students who have not passed in the subject at the local G.C.E. Examination.

At present there are four faculties in the university, that is, of Buddhist Studies, Arts, Languages and Philosophy. The university proposes to establish in the near future two more faculties, one in Science and the other in Ayurveda. There are 743 students at present on the roll, the first batch of 36 students having completed a three-year degree course.

The Chancellor of the university is H.E. the Governor-General of Ceylon; the Minister of Education is the Pro-Chancellor; and Venerable Kiriwattuduwe Pannasara, I.L.D., is the Vice-Chancellor.

Burdwan University, Burdwan (West Bengal), established in June 1960, is a teaching-cum-affiliating university. There are 34 colleges affiliated to the university, including the Regional College of Engineering at Durgapur, the College of Textile Technology, and the Teachers' Training College. The university has already established eight post-graduate departments of study—English, Bengali, Sanskrit, Economics, Mathematics, Physics and Chemistry. Total enrolment for the two years course in these departments is 383.

A brief description of U.P. Agricultural University, Pant Nagar, which is also a newly admitted member of IUB, was given in the previous issue.

Young University

Shivaji University, Kolhapur, established on September 1, 1962, is the youngest of the 55 universities at present functioning in India. The university was formally inaugurated on November 18, 1962 by the President of India, Dr. S. Radhakrishnan.

There are 35 Colleges with an enrolment of about 15,000 students under the jurisdiction of the university. Of these colleges five are situated at the headquarters of the university. The Government of Maharashtra have decided to establish a College of Agriculture at Kolhapur in June 1963. The university is both a teaching and affiliating institution.

New Universities Proposed

The Madhya Pradesh Vidhan Sabha on April 5 passed three Bills for the establishment of two universities at Indore and Gwalior and an Agriculture & Allied Sciences University at Jabalpur.

It is understood that the Central Government has agreed to the establishment of an agricultural university in Andhra Pradesh. Rules and regulations of the university are being framed.

Aims of Kurukshetra University

Shri Pattom A. Thanu Pillai, Governor of Punjab recently opened the newly constructed administrative block of Kurukshetra University. Shri Suraj Bhan, Vice-Chancellor, stated on the occasion that though the university had its pronounced cultural and ethical objectives, it was not designed to be an institution of mere revivalism. Its chief objective was to produce a living synthesis of the old and the new, imbuing the finest Indian values tempered with the dynamism of Europe and America.

COLLEGES

Agra University has granted provisional affiliation upto B.A. standard to two colleges: the Ismail Girls

College, Meerut, and the Gulab Singh Hindu Degree College, Chandpur Siau (Bijnor). Recognition in additional subjects and faculties has been granted to 10 colleges.

Gujarat University has affiliated 15 new colleges this academic year, which is an all-time record during any single year for this university. The total number of colleges affiliated to this university now stands at 80.

Kerala University has granted permanent affiliation to the College of Engineering, Trivandrum, for conducting post-graduate courses in (1) Hydraulics, Irrigation and Flood Control; (2) Electrical Machine Design; and (3) Structural Engineering.

COURSES OF STUDY

Banaras Hindu University is going to start a post-graduate and research institute in *Indian medicines* from the next academic session with a yearly intake of 20 students. The three-year training will lead to the degree of M.D. in Ayurveda. The admission will be restricted to medical graduates, and graduates with A.B.M.S. or any other equivalent university degree, provided they have already passed the Intermediate examination. The students admitted would be given a stipend of Rs. 200 p.m. each. In addition, 10 research fellowships will be granted to non-medical graduates for research.

The university proposes to institute shortly a three-year LL.B. course to improve the quality and standard of law teaching.

A new M.Sc. course in *Applied Geology* will be started shortly and Geophysics is going to be separated into a new Department of Geophysics.

Bambay University has instituted a Chair in Mathematics in memory of Shri Bal Gangadhar Shastri Jambhekar, a distinguished scholar and Professor of Mathematics.

The post-graduate department of English has started functioning from the current academic year.

Gujarat University is to introduce the *three year degree course* from June 1963. As a preliminary step,

pre-university courses were started in June 1962 in the three faculties of Arts, Science and Commerce.

A common course in *General Education* for the first two years of the three-year degree course has been framed, and it will be made compulsory for every student in the Faculties of Arts, Science and Commerce.

A new degree course in *Dentistry*, leading to the degree of Bachelor of Dental Surgery, has been framed and it is expected that arrangements to teach it in the new Dental College started by the State Government will be made from June 1963.

One of the colleges affiliated to the university has started a diploma course in *Journalism*.

The proposal to institute a diploma in *Library Science* is under consideration of the university.

Karnatak University is to abolish the pre-professional course leading to Engineering and Medical degree courses, it is learnt. Consequently, admission to these professional courses will be made from among the students who have passed the B. Sc. (Part I) examination. This step is being taken to check the decline in admissions to the B. Sc. degree course.

Kerala University has sanctioned the starting of a degree course in *Nursing* in the School of Nursing, Trivandrum, with effect from 1963, with an intake of 12 students.

Sanction has been accorded by the university for offering *Cost Accountancy* and *Industrial Organisation* as special subjects for the B.Com. degree in the Sree Sankara College, Kallady, from the current academic year.

A diploma course in *Child Health* (D.C.H.) in the Medical College Trivandrum, with an intake of three students is going to be started shortly.

Madras University has decided to institute a diploma course in *Insurance*.

Marathwada University has established four new departments, viz., Departments of Political Science, History and Ancient Indian Culture, Botany and Mathematics.

SUBSCRIPTION NOTICE

University News is issued every alternate month, the first number having been issued in February 1963. There will be thus six issues in 1963. Price per copy: 50 p. plus postage. Annual subscription: Rs. 5/6/81 (by surface mail); Rs. 6/18/84 (by air mail).

Subscription should be sent by Money Order/Postal Order/crossed cheque, adding the bank commission if the cheque is realised out of Delhi in the name of the Editor, *University News* c/o the Inter-University Board of India, Rouse Avenue, New Delhi-1. Please note that we normally do not send the journal per V.P.P.

Osmania University will introduce from the next academic year (1963-64) "special courses" in B.A., B.Sc. and B.Com. A special course will be of three years' duration, the first year of which will be common with the general course. The pattern of the special course will be the same as that of the general course except that there will be some additional portion of study in the special subject selected by the candidate. Candidates to these courses will be selected on the basis of a competitive test and only those who secure not less than 50% marks in the desired subject of specialisation and not less than 40% marks in other two subjects will be eligible for admission.

The university has started post-graduate courses in *Psychology* and *Linguistics* with effect from the current year.

A degree course in *Journalism* has been started. Hitherto it was only a diploma course.

The university has instituted a shortened B.Ed. course of five months' duration for the benefit of secondary grade trained graduate teachers. The syllabus to be followed is the same as prescribed for the B.Ed. degree except that they do not have to give as many practice lessons as are required to be given by regular candidates.

The question of starting a one-year post-graduate diploma course in science subjects to man multi-purpose schools is also under consideration of the university.

UGC has agreed to finance a new two-year course in *Bio-Chemistry* at the university.

Punjab University has decided to institute Honours degree in *Sociology* for the three year degree course with effect from the admission of 1963.

The university has introduced a four-year B.Sc. Honours course in *Bio-Chemistry* with effect from the current academic year. It has also been decided to institute a two-year M.Sc. course in Bio-chemistry.

ADMISSIONS

Punjab: Any student who has passed the M.A. examination in the third division and desires to improve his division can now reappear either in both the parts of the M.A. examination or can carry forward marks already obtained by him in one of the two parts and reappear only in the other part.

It has been decided by the university that Ph.D. candidates in the Science Faculty must possess a proficiency certificate in French or German or Russian.

The university has decided that a person who has already passed an M.A. examination in a subject, may be allowed to appear in another subject without having obtained at the B.A. examination 45% marks in that subject or a second division in the aggregate.

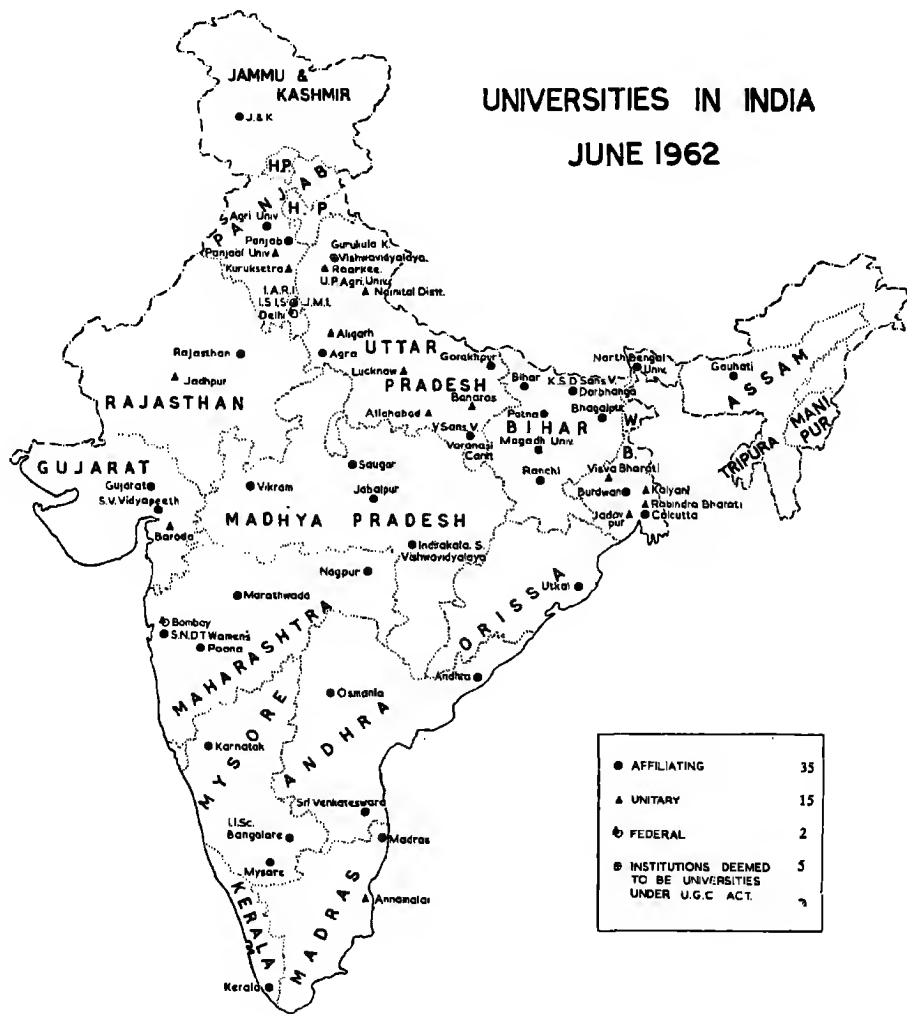
It has been decided that a person who has passed the Part II Examination of the three-year B.A./B.Sc. course from another university, be not allowed to join the third year class of this university.

It has been decided to reserve for women students five seats in the Physics Department and five in the Chemistry Department (for each of the B.Sc. Honours and M.Sc. courses), and two seats in the Pharmacy course for a period of three years. The reservations are subject to the condition that no woman shall be admitted if the marks obtained by her are less than the last student admitted on merit by more than 10 per cent.

(Continued on page 14)

UNIVERSITIES IN INDIA

JUNE 1962



The above map shows 52 universities that were in existence in June 1962. Three more universities which have since come up are: Orissa University of Agriculture & Technology, Bhubaneswar; Rajasthan Agricultural University, Udaipur; and Shivaji University, Kolhapur. All the three new universities are unitary in type.

UNIVERSITY ENROLMENT & POPULATION IN INDIA (1961-62)

State	Population (in millions)	Number of universities,	Average popu- lation per uni- versity (in millions)	Total university enrolment	University enrolment per million of population
Andhra	35.98	3	11.86	59,986	1.667
Assam	11.87	1	11.87	32,157	2.709
Bihar	46.45	5 (1)*	9.29	103,946	2.238
Delhi	2.65	1	2.65	24,181	9.125
Gujarat	20.63	3	6.87	54,159	2.625
Jammu & Kashmir	3.56	1	3.56	7,962	2.237
Kerala	16.90	1	16.90	50,544	2.991
Madhya Pradesh	32.37	5	6.47	80,311	2.481
Madras	33.68	2	16.84	63,511	1.886
Maharashtra	39.55	4+(1)*	9.88	95,439	2.413
Mysore	23.58	2	11.79	51,715	2.193
Orissa	17.54	1+(1)*	17.54	16,442	937
Punjab	20.30	2+(2)*	10.15	61,940	3.051
Rajasthan	20.15	1+(2)*	20.15	33,587	1.667
Uttar Pradesh	73.74	9	8.19	108,197	1.467
West Bengal	34.92	5+(2)*	6.98	166,375	4.764
	433.95 Total	46+9* Total	9.43 Average	1,010,452 Total	2,328 Average.

Comparison of University
Enrolment per million of Popu-
lation in India with that in
some Other Countries (1957)

Country	University enrolment per million of population
India	1.977
U.S.A.	16.670
U.S.S.R.	10.060
Japan	7.133
Australia	6.190
Canada	4.550
France	3.880
West Germany	3.600
U.K.	1.615

*Number of new universities started from 1962-63 academic year.

INSTITUTIONS 'DEEMED TO BE UNIVERSITIES'

A list of the 55 universities functioning at present in India appeared in the February issue of *University News*. Apart from these universities, there are the following five institutions which are "deemed to be universities" under Section 3 of the UGC Act of 1956 :

Institution	Location	Director/Vice-Chancellor
1. Gurukul Kangri Vishwavidyalaya	Hardwar	Shri Satyavrata Sidhanalankar
2. Indian Agricultural Research Institute	New Delhi	Dr. B.P. Pal
3. Indian Institute of Science	Bangalore	Dr. R.S. Krishnan
4. Indian School of International Studies	New Delhi	Dr. A. Appadurai
5. Jamia Millia Islamia	New Delhi	Dr. M. Mujeeb

MEDIUM OF INSTRUCTION

Thirteen universities have adopted Hindi as the medium of instruction in different courses. The universities are : Banaras, Bhagalpur, Bihar, Indira Kala Sangeet Vishwa-vidyalaya, Jabalpur, Jodhpur, Lucknow, Magadh, Patna, Ranchi, Sardar Vallabhbhai Vidyapeeth, Saugar and Vikram.

Kerala University has decided to adopt English as the medium of instruction in all colleges and to abandon the policy of switching over to the regional language.

Punjab University has decided that the medium of instruction for all B.A. (Hons.) subjects be English.

EXAMINATIONS

Agra : For different examinations to be held this year, 79,909 candidates have been registered, the largest number (18,710) being in B.A. (Part I).

Osmania University has agreed to have a university examination at the end of each year in B.A., B.Sc. and B.Com.

Punjab University has decided that persons who have already failed in the Intermediate examination either in 1961 or 1962 be allowed to appear in this examination as private candidates up to 1964, without requiring them to satisfy any category of private candidates.

The university has revised its earlier decision so that women residing in Delhi will be also allowed to appear privately in the Intermediate English Only examination.

Pre-university examination in the Commerce groups will not be open to private candidates, except failed candidates.

Regular college students joining the Army due to the national emergency will be permitted to take their examination as private or regular students within three years of their being disembodied. A student under compartment could avail himself of the exemption facility within two years of his being disembodied.

It is proposed to give two chances to the three-year degree course student placed in compartment.

A person who has already passed the Pre-Medical examination from the university and wants to qualify for Pre-Engineering can now appear in the subject of Mathematics, and similarly, a person who has already passed the Pre-Engineering examination and wants to qualify for Pre-Medical can appear in Biology.

RESEARCH & PUBLICATIONS

Banaras Hindu University : The Rockefeller Foundation have sanctioned a grant of \$ 10,000 for research in Zoology. The Ford Foundation have sanctioned a grant of \$ 102,500 for research in Reproduction Physiology in the same department.

The convocation lectures delivered during the Convocation Week of the university in December last, have been published in the form of a brochure.

Bombay University with the assistance of UGC, expects to start in the near future a new journal dealing with problems of General Education under the editorship of Prof. G.C. Bannerjee, Professor of English.

Punjab University has taken the compilation of a comprehensive history of North-Western India.

Vikram University has published a *Directory of Institutions*, giving names of its schools of study and the colleges under its jurisdiction, names of the heads of these institutions, number of students on roll, and the courses of study conducted at each institution.

Visva-Bharati's Publication Department has issued a new enlarged edition of Tagore's *Chhanda*. Edited by Shri Prabodhchandra Sen, the book contains exhaustive notes and is profusely illustrated.

★

When West Berlin's Mayor Willy Brandt visited the great new Mann Auditorium in Tel Aviv, he commented on Israel's gesture in naming a concert hall after the late German writer, Thomas Mann. But he was corrected—the hall was named not after the German writer but after Frederic Mann of Philadelphia.

"What did he ever write?" asked Mayor Brandt.

"A cheque," was the reply.

CONVOCAION NEWS

Universities' Role In Defence Vital, Says Chavan

The Defence Minister, Shri Y.B. Chavan, speaking on the occasion of the convocation of Gorakhpur University on January 17 said that as institutions concerned with shaping the minds of the growing generations, Indian universities and colleges would naturally have to play a very vital part in the country's defence efforts.

He added that in a democratic society, universities were and had to be free and autonomous organisations. They had to concede to them a much greater autonomy than what was generally enjoyed by other statutory bodies, because it was an essential pre-condition for the maintenance and improvement of the quality of their intellectual life.

* * *

Falling Standards :

Bharat Ratna Dr. P.V. Kane, noted Indian scholar who was recently honoured by Bombay University for his learning and scholarship in ancient literature, is convinced that the standard of education in India is going down.

"A glaring illustration of the falling standard of university education," he said recently at a reception held in his honour in Bombay, "is the conferment of the honorary doctorate of Laws on me!"

He explained: "Being a lawyer for 45 years, I devoted only a small part of my time for Sanskrit study."

* * *

Austerity in Convocation

Austerity marked the convocation of Calcutta University held on January 19, 1963. Contrary to the age-old custom, no person was invited to address the convocation; nor were the ordinary graduates invited to be present in person to receive their degrees and diplomas, which were sent to the respective heads of institutions for distribution among the graduates. Only doctorate and other research degrees, medals and special prizes were awarded at the convocation.

● Delhi University conferred the honorary degree of Doctor of Laws on His Royal Highness Prince Nordom Sihanouk, Head of the State of Cambodia, at a special convocation held on January 28, 1963.

● Convocations of the Loka-Siksha Samsad and the Institute of Rural Higher Education of Visva Bharati were held on February 6, 1963. Diplomas and certificates were awarded to 99 successful candidates—40 to the Rural Services diploma course and 14 in the Agricultural certificate course. As a symbol of the award, each *Snatak* received a *Saptaparni* twig from the Vice-Chancellor.

● The Sixth annual convocation of Sri Venkateswara University was held on February 2, 1963 under the presidency of General S. M. Srinagesh, Chancellor of the University. The convocation address was delivered by Dr. B. Gopala Reddy, Union Minister for Information and Broadcasting. A total of 821 candidates received their degrees in person and 394 in absentia. Honorary degrees of Doctor of Letters and Doctor of Laws were conferred on Dr. B. Gopala Reddy and Dr. S.B.P. Pattabhi Rama Rao, former Andhra Pradesh Minister for Education, respectively.

LIBRARY NEWS

● Jadavpur University has received a donation of rare books on Geology which formed part of the private library of the Late Prof. Hem Chandra Das Gupta, a well-known geologist. The gift was made at a ceremonial function inaugurated by Prof. D. N. Wadia, National Professor and Geological Adviser to the Government of India, early in March.

● An exhibition of rare books, manuscripts, and books on Ajanta, Ellora and Marathwada was held in the Marathwada University Library on the occasion of the 13th session of the Marathi Granthalaya Parishad held at Aurangabad on January 25-27. In all 210 items were displayed. The exhibition was declared open by Smt. Kamalabai Dongerkery.

N.C.C NEWS

Aims of N.C.C.

At an NCC rally held recently at Banaras Hindu University—the first university to introduce compulsory N.C.C. training even before the national emergency was declared—Major-General Virendra Singh, Director-General of NCC, said the aim of NCC was threefold: First, to develop the qualities of character, comradeship and leadership; secondly, to provide service training for the defence of the country; and thirdly, to build up a potential reserve force for emergency. The most important task of NCC, however, was to develop the youth as an ideal citizen.

The Major-General added that the aim of compulsory military training was not to make the country's youth militant, but to equip them both mentally and physically for the great responsibility in defending the honour and integrity of the country and for shouldering their future responsibilities towards the nation.

He said that emphasis would be laid on the growth of the NCC Rifles which was cheaper as well as very essential in the circumstances. The period of training would be from July to February. The Government, he said, would be spending about Rs. 25 crores annually on NCC training.

Universities Implementing Compulsory N.C.C. Scheme

Many universities have already made NCC training compulsory for undergraduate male students, and it is expected that, in conformity with the decision taken by Vice-Chancellors at the meeting of the Inter-University Board held in Bombay, almost every university will implement the scheme from the next academic year.

Recently, information has been received about these universities having decided to introduce the scheme: Agra, Gujarat, Jadavpur, Kerala, Marathwada, Osmania and Sardar Vallabhbhai Vidyapeeth. Osmania University has included NCC training as part of the university curriculum. There will be an examination in December/January each year, which will be con-

ducted by NCC authorities. Mention of the grades secured by the candidates in this examination would be made in the diplomas to be awarded to them.

Teachers Complete Training

The passing-out parade of the first batch of professors and lecturers drawn from colleges all over the country for training as NCC Officers was held at Kumptec (near Poona) on March 31. The Deputy Defence Minister, Mr. D.B. Chavan, took the salute.

It is planned to train 3,500 teachers as NCC Officers in view of the compulsory NCC scheme.

SUMMER SCHOOLS

Ministry of S.R. & C.A. Plans Five Courses

About 30 selected scientists from various universities and research centres are expected to participate in each of the following summer schools to be organised by the Ministry of SR&CA during 1963.

Engineering: Probably at Bangalore from May 23 to June 6, with Dr. S. R. Sen Gupta, Director, Institute of Technology, Kharagpur, as the director of the summer school.

Chemistry of Polymers: At Dalhousie from May 28 to June 11, under the directorship of Dr. S. R. Palit, Professor of Physical Chemistry, Indian Association for the Cultivation of Science.

High Energy Physics: At Kodikanal from June 1 to 15, with Dr. Aladi Ramakrishnan, Director, Institute of Mathematical Sciences, Madras, as the director of the school.

Himalayan Geology and Geography: At Simla from June 15 to 25 under the guidance of Dr. D. N. Wadia, National Research Professor of Geology.

The Ministry of SR & CA have held summer schools in the past in Anthropology, Botany, Biochemistry, Organic Chemistry, Geography, Theoretical Physics and Zoology. The essential feature of these summer schools is that all the participants live together so as to have ample opportunities of formal and informal discussions on the subjects in regard to the research work done by them.

Summer Institute for Secondary Teachers

Four eight-week summer institutes for higher secondary school teachers in Science and Mathematics are to be held from May 18 to July 15, 1963 under the joint auspices of the Ministry of Education, UGC and the U. S. Agency for International Development which will make available experts from the Teachers College, Columbia University.

These programmes are designed to orientate secondary teachers' knowledge of their subject and to acquaint them with new developments in the teaching of Biology, Chemistry, Physics and Mathematics. The summer institute in Physics will be held at Delhi University, in Chemistry at Poona University, in Mathematics at Rajasthan University, Jaipur and in Biology at Madras University.

● A summer school in Linguistics will be conducted at Osmania University during May-June 1963. About 150 teachers and fellows from all over the country are expected to attend.

● During the next summer vacations, Punjab University proposes to arrange a course to train college lecturers in the following subjects: Psychology of Youth, Philosophy of Education, and General Methods of Education and Evaluation.

● The Institute of Economic Growth, Delhi, proposes to arrange a summer school on "Problems in Indian Demography" during May 1963.

Vacancies

The University of Ceylon, Peradeniya, has invited applications before April 30 for appointments to the Chairs of Buddhist Philosophy, History, Economics, Philosophy, and Mathematical Engineering, in the grade of Rs. 15,000—Rs. 21,000 per annum.

U.P.S.C. Examination

A combined competitive examination for recruitment to the IAS and allied services, commencing on October 4, 1963, will be held by UPSC at 16 centres all over India. Last date for receipt of applications on prescribed form : May 6, 1963.

Student-Exchange Programme

For the last two years Osmania University has been having a student exchange programme with Minnesota University (U.S.A.). Under this programme, Minnesota University assumes financial responsibility for the student from Osmania University not exceeding \$1,500 for one year in cash payment, which is sufficient to cover his living expenses. The university provides for tuition exemption. Osmania University, in turn, offers a scholarship of Rs. 250 per month to the student from Minnesota University to meet his requirements in India.

On the initiative of the University of Minnesota, a scheme is being developed under which facility for the study of American Literature will be provided at Osmania University. A visiting professor from Minnesota University is now at Osmania to work the programme.

Ten students from Wisconsin University (U.S.A.) would come for a study of one-year intensive course in Telugu at Osmania University this year. The entire expenditure on this programme would be borne by Wisconsin University.

States Provide Teachers

In order to provide facilities to the students of Allahabad University for learning an Indian language other than their own, the university authorities approached some time back various State Governments to provide funds for the creation of teaching posts in modern Indian languages. In response to this appeal, the Governments of Jammu & Kashmir, Madras, Bengal, Gujarat, Maharashtra and Punjab have provided funds for the creation of a lecturer's post each for the teaching of Urdu, Tamil, Bengali, Gujarati, Marathi and Punjabi respectively. The Government of Mysore has sanctioned the post of a part-time lecturer for teaching Kannada, and UGC has sanctioned the post of a lecturer in Telugu.

Teaching in Urdu, Tamil, Gujarati, Marathi, and Bengali has already started. Teaching in Telugu, Punjabi and Kannada is expected to start from July this year.

Film Society Inaugurated

Dr. C. D. Doshmukh, Vice-Chancellor, inaugurated the Delhi University Film Society on January 31, 1963 at the Central Institute of Education. The aims and objects of the society are to advance education and culture through the medium of films. The society will organise film shows in the constituent and affiliated institutions recommended by the University Film Council.

The University Film Council has been established with the co-operation of the Government of India and UGC for regular and effective use of films in Indian universities. Educational short and documentaries, both Indian and foreign, play an important part in the programmes of the Council. The Council is a non-political, non-commercial, and independent organisation. Thirty-one universities are represented on the Council at present.

Unesco Centre

In co-operation with the Indian National Commission for Unesco, Punjab University has set up a centre to popularise and advance the aims of Unesco. The university has sanctioned a sum of Rs. 5,000 for purchasing literature for the centre.

Besides the Chandigarh centre, a Unesco Centre has been established at Bombay by the Asiatic Society and a Unesco Club at Madras by Nrithodya Art Centre.

● Delhi University plans to build a non-resident students' centre at an estimated cost of Rs. 1.52 lakhs. Necessary financial provision is understood to have been made in the university budget for the current Plan period. At the Conference of Vice-Chancellors, held in New Delhi in October 1962, the idea of establishing non-resident students' centres at various universities found wide acceptance.

● The Punjab Government has decided not to shift the Archives Department located at Punjab University, Patiala, to Chandigarh. The university would now provide a suitable building for the department, which has so far collected 22,000 reference books and 4,000 manuscripts.

News from Abroad

Commonwealth Universities' Congress

More than 500 delegates from over 130 universities in the various Commonwealth countries will assemble in the University of London Senate House from July 15 to 18, 1963 to discuss subjects of common interest. The occasion will be the ninth Quinquennial Congress of the Association of Universities of the Commonwealth, which also marks the Jubilee of the Association of Universities of the British Commonwealth (founded in 1913). Previous Congresses have been held in the post-war period at Oxford (1948), Cambridge (1953) and Montreal (1958).

Her Majesty The Queen Mother, Chancellor of London University, will be the President of the Congress.

Apart from Vice-Chancellors, Presidents, Principals, Deans and Professors from Commonwealth universities, observers from other university institutions and learned societies, including American, European and Indian inter-university organisations, will attend the Congress. Speakers from India will include Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University; and Dr. A.C. Chatterji, Vice-Chancellor, Gorakhpur University.

Highlights of the social events arranged on the occasion will be a special garden party to the delegates by Her Majesty The Queen, a reception by the British Government, and a dinner at Grosvenor House at which the British Prime Minister, Mr. Harold Macmillan, will be the principal speaker.

Central Registration for Admissions in U.K.

The British Universities Central Council on Admissions has introduced a scheme for a central office for university admissions. After a year's experimental try-out, it will come into full operation in the autumn of 1964.

A similar system of central registration was adopted by Delhi University last year in respect of admissions to its various colleges.

Under the British scheme, applications for admission to all but a few universities will have to go through the new central office. They must be submitted by December 31 of the year preceding the proposed entry. Candidates will complete a single application form, copies of which will be forwarded by the central office to each university to which the candidates wish to apply, up to a maximum of four. Those named as his first and second preferences must make their decision by March 25.

Indian Student in U.S. Shines

Shri Samosh Kumar, studying for doctorate at Clark University (U.S.A.), has been chosen a member of "Sigma Pi Sigma", the American National Physics Society, to which members are elected on the basis of high grades in Physics courses. He attended St. Andrew's College, Gorakhpur, and received the B.Sc. degree from Gorakhpur University in 1961.

● Shri Kailash Behari Mathur, of Bombay, has been selected president of the Students Union of the four colleges at Loughborough (U.K.). Shri Mathur is taking a post-graduate course in Industrial Management.

VISITORS

Prof. Randolph Quirk, Professor of English at London University, arrived in Bombay on March 24 on a month's tour of India under the auspices of the British Council. He arrived in New Delhi on April 12 after visiting over 20 institutions in Hyderabad, Bangalore, Calcutta, Cuttack, Bhubaneswar, Patna, Lucknow and Allahabad. During his stay in India, he has studied the methods of teaching the English language and the problems of English usage and pronunciation.

Sir Andrew Cohen, Director-General of Britain's Department of Technical Co-operation, visited India from February 20 to 29 in the course of a tour of a number of Colombo Plan countries. While in Delhi, Sir Andrew had talks on

various aspects of British technical assistance to India, including requests for British staff to fill teaching posts in this country, the supply of equipment to research institutions, and the training of Indian engineers and technicians in Britain. He also visited the College of Engineering and Technology in Delhi—currently the biggest project in India being assisted by his Department.

Sir Christopher Cox, Educational Adviser to the Department of Technical Co-operation, U.K., recently concluded a five-week tour of India. The purpose of his visit was to obtain a broad picture of the problems and achievements of the Indian educational system.

Miss Lisa Sergio, an American journalist and lecturer sponsored by the U.S. State Department's Cultural Exchange Programme, spoke at 35 Indian Colleges and at another 30 clubs and organisations from November 30 to January 25. Since then she has lectured on the India she discovered, to a group of American colleges in the States of Kansas and Missouri (U.S.A.).

Mr. Ganche Ganey, Minister for Education and Culture of the People's Republic of Bulgaria, has stayed in India for a week at the invitation of Prof. Humayun Kahir, Union Minister of Scientific Research & Cultural Affairs. On February 20, he signed a cultural agreement with the Indian Minister in New Delhi.

U.A.R. Educationists: A three-member delegation from U.A.R., led by Mr. Abd El Aziz Salama, Dean, Teachers' Training College, arrived in Delhi on March 1 on a fortnight's visit to India. The other members of the delegation were Mr. Mostafa Kamel Hilmy, Secretary-General, Supreme Council of University, and Mr. Ahmed Khaki, Director of Education, Southern Zone, Cairo. While in Delhi, the delegation called on Dr. K.L. Shrivastava, Union Minister of Education, and exchanged views and experiences on various problems of education, including medium of instruction, teaching of languages, and scientific and technical education.

Scholarships and Awards

New Scheme of Loan Scholarships

The Ministry of Education has announced a new National Loans Scholarships Scheme to assist the needy and meritorious students in completing their education. Under this scheme, interest-free loans, varying from Rs. 720 to Rs. 1,750, according to the course of study, will be given to selected students whose parents' income does not exceed Rs. 500 p.m. The amount of any other scholarship a student may be getting will, however, be taken into account while determining the amount of the loan.

The scheme is estimated to cost Rs. 9 crores during the remaining three years of the third Five-Year Plan, and 66,900 students are likely to benefit. The number of loan scholarships to be made available during 1963-64 is 16,000.

Recovery of the loans will be effected by monthly instalments commencing one year after the loanee secures employment. But in the case of students who take up teaching profession recovery to the extent of 1/10th of the total loan will be waived for every year of service rendered. Thus a teacher who puts in 10 years of service will not be required to repay the loan at all.

The Ministry of Education will advance funds to the State Governments for payment of loans on the basis of total enrolment at different stages of education. The State Governments will be inviting applications for loans in May this year.

Food Research Fellowships

The Central Food Technological Research Institute, Mysore, has a certain number of vacant research fellowships in its different departments, tenable for two years with possible extension to a third year. The minimum qualification for a senior fellowships (value Rs. 400/500) is a doctorate in Science or a first class Master's degree in Engineering. For a junior fellowship (value Rs. 250/300) the minimum qualification prescribed is a first class Master's degree in Science or a first class Bachelor's degree in Engineering.

Fellowships for African Students

To meet the increasing needs of newly independent countries in Africa, the Government of India have decided to raise the number of fellowships for the training of African university personnel in India from 5 to 33. Selected fellows will commence their programme in Indian universities and colleges in the academic session 1963-64.

Australian University Scholarships

The Australian National University, Canberra, has a small number of research scholarships, open to worldwide competition, in a wide range of subjects—Sciences and Humanities. Successful candidates will be expected to enrol for a Ph.D. degree at the university. The value of the scholarship is £ A 950 per annum, except for medical scholars for whom the allowance is £ A 1,372 per annum. The university will also make a contribution towards the scholar's fare. Further particulars may be obtained from the Editor, *University News*.

U. N. Fellowships

The United Nations is offering 40 fellowships this year, mainly to nationals of developing countries, to enable them to study Criminal Law and Human Rights Codes. The scheme was initiated last year, when 21 fellowships were approved under a General Assembly resolution calling for the expansion of the UN programme of advisory services in the field of Human Rights. The last date for the receipt of applications this year is May 1.

Scholarships for Railway Employees' Children

The scheme of awarding, 1,000 scholarships every year from the Staff Benefit Fund to Railway employees' children for technical education has been in force for the last seven years. In 1961-62, the total number of scholarships, including those continuing from the previous years, was 2,537, entailing an expenditure of about Rs. 900,000.

Shanti Swarup Bhatnagar Memorial Awards

The Prime Minister, Shri Jawaharlal Nehru presented the Shanti Swarup Bhatnagar Memorial Awards, of the value of Rs. 10,000 each, for scientific research to Professors K. Chandrasekharan of the Tata Institute of Fundamental Research and C. Radhakrishna Rao of the Indian Statistical Institute at a special function held at the National Physical Laboratory, New Delhi, on March 23. Dr. Rao donated his award to the National Defence Fund.

The award was instituted in 1957 in memory of the late Dr. Shanti Swarup Bhatnagar by the Council of Scientific and Industrial Research, to be given to Indian scientists every five years for conspicuously important contributions in any field of science. The first award was given to the late Dr. K.S. Krishnan who was then the Director of NPL.

Prof. Chandrasekharan's recent researches in the field of Mathematical analysis have been responsible for significant advances. His original contribution to the Theory of Functional Equations of Zeta Functions have earned him international repute.

Dr. C. Radhakrishna Rao, Professor and Head of the Division of Theoretical Research and Training, Indian Statistical Institute, Calcutta, is internationally known for his contribution to Statistical Methodology and Probability.

Atomic Energy Department Scholarships

The Department of Atomic Energy every year awards 120 undergraduate scholarships in Physics, Chemistry, Biology, Agriculture, Metallurgy, Chemical Engineering, Mechanical Engineering, Geology and Mining to outstanding students at various universities with the object of encouraging them to pursue scientific studies and seek a career in the various organisations under the Department. Twenty junior research fellowships and 10 senior research scholarships for study and research in Cosmic Rays and Nuclear Physics are also awarded each year.

For want of space, the note on scholarships administered by the Ministry of SR & CA, promised in the previous issue, has been held over.

Book Notes

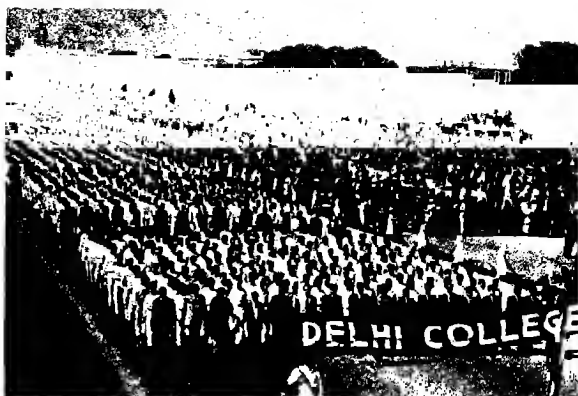
The History of Mankind: Cultural and Scientific Development is to appear in a multi-volume edition in English (London, George Allen and Unwin Ltd.; New York, Harper and Row Inc.) and subsequently in four other European languages. Editions in Arabic, German, Hindi and Japanese are also contemplated. This work, which will cover the development of culture and science from pre-history to the 20th century, has been prepared by a team of international scholars working under the supervision of the International Commission for a History of the Scientific and Cultural Development of Mankind, organised by Unesco.

The Guidance Review: The Central Bureau of Educational and Vocational Guidance of the National Council of Educational Research and Training has brought out this quarterly beginning January this year for establishing effective communication among its personnel all over the country.

Osmania Journal of English Studies: Published by the Department of English, Osmania University, as an organ of the University English Forum. Articles in the second issue (1962) included one by Dr. Jay Gurian, Visiting Professor of American Literature at the university, on "The Romantic Necessity in Literary Naturalism: Jack London".

Report of the Study Group on Community Development. Panchayat Raj and Co-operation in University Curricula: (Published 1963, National Institute of Community Development, Mussoorie). Contains a review of the existing position of teaching and research in the fields of Community Development, Panchayat Raj and Co-operation at various universities, and the recommendations of the Study Group on the place of Community Development Study in General Education.

List of Rare and Valuable Books (January 1, 1963) Published by the Chokhamba Sanskrit Series Office, Varanasi, is an alphabetical list of rare books. Only one copy of each title is said to be in stock.



UNIVERSITY CONTINGENT AT R-DAY PARADE: On January 26, 1963—for the first time—about 10,000 students and teachers from the colleges and institutions of Delhi University participated in the Republic Day parade. At the head of the university contingent were Dr. C. D. Deshmukh, the Vice-Chancellor, and the former Vice-Chancellors, Dr. G. S. Mahajani and Dr. V. K. R. V. Rao.

Sports

Sports Board Meeting

The 23rd annual meeting of the Inter University Sports Board of India will be held on April 22-23 at Jadavpur University, Calcutta. Dr. T. Sen, Rector, Jadavpur University, will preside.

Items on the agenda include the allocation of inter-university fixtures for 1963-64 and the consideration of universities' suggestions in respect of certain rules for the conduct of games and the introduction of new tournaments.

The Board will also receive the report of the appellate committee constituted to examine and give decision on the dispute arising from the scrapping of the Aligarh University Hockey Team by Jabalpur University in January last.

Railway Concession

Railway travel concessions for sports teams, withdrawn recently due to the national emergency, will be re-introduced "as early as possible", stated Mr. S. V. Ramaswamy, Deputy Minister of Railways in the Rajya Sabha on February 19.

Film on Football

A 16-mm. instructional film on football has been produced by the Audio-Visual Education Department of Saugar University to assist colleges and universities in improving the standard of play.

In 45 minutes, the film demonstrates kicking, ball control, heading, throwing-in, dribbling, passing, goal-keeping and some basic tactical moves. Captions are given in both Hindi and English. Cost of the film: Rs. 350.

University Stadium Opened

The Bombay University Sports Stadium at Marine Lines was formally declared open by Shri Y. B. Chavan, Union Defence Minister, on February 10. The stadium has been constructed at a cost of Rs. 10 lakhs.

Model Youth Hostel

The Government proposes to build a model youth hostel in New Delhi on a 0.81 acre plot of land, with a provision for 128 beds. Detailed site plans and estimates are under preparation.

PERSONAL

DR. V.K.R.V. RAO, Director, Institute of Economic Growth, Delhi, has been appointed Member, Planning Commission.

DR. KARAN SINGH, Sadar-i-Riyasat of Jammu & Kashmir and Chancellor of Jammu & Kashmir University, has been selected Chancellor of Banaras Hindu University for a period of three years with effect from February 16, 1963.

DR. R.V. SATHE assumed charge as Vice-Chancellor of Bombay University on March 1, 1963, in succession to Dr. V.R. Khanolkar.

DR. MOHAN SINHA MEHTA, on the expiry of his current term, was re-appointed Vice-Chancellor of Rajasthan University for three years commencing January 4, 1963.

SHRI BABUBHAI J. PATEL, ex-Vice-Chancellor of Sardar Vallabhbhai Vidyapeeth and a member of the university senate, has been appointed Officiating Vice-Chancellor for three months with effect from March 1, 1963, in place of Mr. M.D. Patel, Vice-Chancellor, proceeded on leave.

SHRI C.L. SINGHAL, Deputy Registrar, has assumed charge of the office of Registrar, University of Rajasthan, Jaipur, with effect from March 16, 1963.

SHRI S.B. SHAPETI, Deputy Registrar, Karnatak University, has taken over charge as Officiating Registrar for three months from March 18, 1963, vice Shri S.S. Wodeyar, Registrar, who has gone abroad.

DR. FREEMAN KENNETH STEWART of Toronto (Canada) has succeeded Dr. V.S. Jha of India as Director of the Commonwealth Education Liaison Unit in London. Dr. Stewart will take up his appointment on June 1, 1963.

SHRI BADR-UD-DIN TYABJI, Vice-Chancellor, Aligarh Muslim University, has been nominated a member of the All-India Council for Sports vice Shri A.A.A. Fyzee resigned.

PROF. S. K. MITRA, National Research Professor of the Institute of Electricity and Electronics, Calcutta, has been elected a member of the Basic Science Section of the

International Academy of Astro-nautics.

DR. S.S. SHRIKHANDE, Professor of Statistics, Banaras Hindu University, has been elected a Fellow of the Institute of Mathematical Statistics of the United States of America.

PROFESSOR A.J.C. WILSON, Professor of Physics at the University College of South Wales, Cardiff, who visited India in January this year for the International Symposium on Protein Structure and Crystallography at Madras University, has been made a Fellow of the Royal Society of London.

DR. S.D. CHOPRA, Professor and Head of the Mathematics Department, Kurukshetra University, has been awarded a senior visiting fellow-ship by the Department of Scientific and Industrial Research, Britain. He will work for six months on the problems connected with the detection of nuclear explosions, at the Royal Observatory, Edinburgh.

DR. B. DAYAL, Reader in Physics, Banaras Hindu University, received the Wattumal Prize of Rs. 5,000, a gold medal and citation for his outstanding research work in 1962.

DR. U. ASWATHANARAYANA, Reader in Geology at Andhra University, Waltair, has been given an award under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme.

SHRI JAYANT NARLIKAR, an alumnus of Banaras Hindu University, has been selected Berry Ramsay Fellow of the King's College, Cambridge University, for his outstanding research in Mathematics. Last year Shri Narlikar was awarded Smith's Prize at Cambridge for the best research paper in Mathematics.

Where Students and Parents Disagree

A recent survey conducted by the Educational Testing Service of America, which carries on interesting research and testing programmes in the field of education, showed that on the question of whether scholarships should be awarded on the basis of financial need or academic ability, the parents' response tended to favour "merit" rather than "need" as the major consideration; the students, on the other hand, tended to favour "need".

To a question on student loans, such as the Government of India now proposes to introduce, most of the parents favoured the loans in the belief that students would then take education more seriously or develop a more responsible attitude towards money. Students, however, expressed considerably less enthusiasm for meeting college expenses in this way.

For

QUALITY & RELIABILITY

Insist on Indian Make

Toshniwal

LABORATORY
ELECTRONICS
ENGINEERING & INDUSTRIAL
INSTRUMENTS

Contact :

TOSHNIWAL BROTHERS PRIVATE LTD.

198 Jamshedji Tata Road, Bombay-1

Branches :

Keshavl Road,
Ajmer.

11 British Indian St.,
Calcutta-1.

3E/8 Jhandewalan Extn.,
New Delhi-1.

Round Tana, Mount
Road, Madras-2.

To Know
The Dimensions of the Dragon
READ

THE CHINESE AGGRESSION

by
Dr. Satyanarayan Sinha

A first-hand account from Central Asia.
Tibet and the Himalayas

Foreword by
General K.S. Thimayya

Price Rs. 6.25 In U.K. Sh. 12 6 In U.S. \$ 3.00

RAMA KRISHNA & SONS

Booksellers

16/B, Connaught Place,
New Delhi-1.

G. T. Road,
Jullundur.



Oxford Illustrated Dictionary

Text edited by JESSIE COULSON
C. T. CARR, LUCY HUTCHINSON
and DOROTHY EAGLE

This new book combines, in a form that can be conveniently handled, the essential features of dictionary and encyclopaedia. There are some 1700 text-figures depicting works of man and of nature. The book provides information about spelling, punctuation, and meaning; it gives etymologies when they are likely to interest the non-specialist; and it contains many facts usually sought in an encyclopaedia rather than a dictionary. Special care has been taken with definitions of scientific terms.

992 pages, 642 illustrations comprising
some 1700 text-figures, 50s.

OXFORD UNIVERSITY PRESS

Form IV

1. Place of Publication : New Delhi-1.
2. Periodicity of Publication : Once in 2 months.
3. Printer's name : B. D. Laroia,
Nationality : Indian,
Address : Inter-University Board of India,
Rouse Avenue, New Delhi.
4. Publisher's Name : B. D. Laroia
Nationality : Indian,
Address : Inter-University Board of India,
Rouse Avenue, New Delhi-1.
5. Editor's Name : B. D. Laroia
Nationality : Indian,
Address : Inter-University Board of India,
Rouse Avenue, New Delhi-1.

Names and addresses of individuals
who own the newspaper and
partners or shareholders holding
more than one per cent of the
total capital :

Inter-University Board of India

I, B. D. Laroia, hereby declare that the particulars given above are true
to the best of my knowledge and belief

April 1, 1963.

Sd. B. D. Laroia
Signature of Publisher

ADVERTISMENT RATES	For 4 Insertions			
	Per Insertion			
	Space			
	Full page (16-24 cm.)			
	Rs. 300	Rs. 1,000	Rs. 600	Rs. 140
	Rs. 175	Rs. 600	Rs. 350	Rs. 140
	Rs. 100	Rs. 350	Rs. 40	Rs. 140
	Rs. 40	Rs. 140	Rs. 40	Rs. 140
	Half page	Quarter page	5.5 x 6 cm. space (17 lines)	

FOR
CONTEMPORARY
ARTICLES OF OPINION
READ

The
American
Review
A QUARTERLY

The AMERICAN REVIEW is an informative magazine containing authoritative articles by eminent educationists and authors on all aspects of American life and civilization. The subjects covered include art, literature and philosophy, economics, science, sociology, education and law.

Hand this order form
to your subscription agents
or mail directly with
remittance to :

ORDER FORM

Please send

THE AMERICAN REVIEW

1 YEAR (4) ISSUES ☐ Rs. 3
2 YEARS (8) ISSUES ☐ Rs. 5

NAME.....

ADDRESS & P.O.

CITY.....ZONE.....

DISTRICT.....STATE.....

U.S. INFORMATION SERVICE
BAHAWALPUR HOUSE
SIKANDRA ROAD
NEW DELHI-1.

I enclose payment of Rs.....by
cheque postal order made payable to the AMERICAN
EMBASSY, NEW DELHI.

Date..... Signature.....

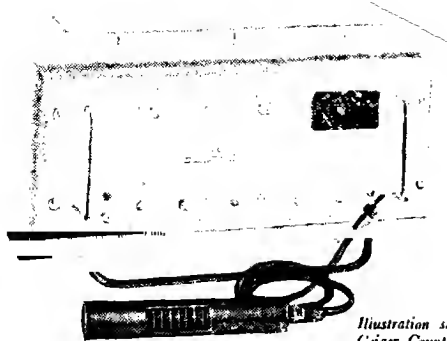


Illustration shows a Geiger Counting Set-up for routine counting with Utility Scaler type SS361 and a Beta-Gamma G.M. Probe.

TROMBAY ELECTRONIC INSTRUMENTS

- **Reliable**
- **Accurate**
- **Moderate Cost**
- **No Foreign Exchange**
- **After-Sales-Service**

UTILITY SCALER TYPE SS361

The SS361 is a compact, low cost unit which combines a three decade glow tube scaler and an electronically regulated EHT supply in a single unit. A large counting capacity of 10^7 counts enabled by a four digit mechanical register following the decade stages, a high input sensitivity for negative pulses achieved by an input amplifier and a wide range of pulse discrimination by an accurately calibrated discriminator are a few notable features of the scaler. The wide range of EHT supply is adequate for most of the commercially available Geiger Detectors and Scintillation Heads of low drain.

If used with a Quenching Unit type PU630, accurate resolution corrections for Geiger counting is possible. The SS361 can also be connected to our electronic Preset Timer type ET450 for time-controlled operation between 1 to 9999 seconds.

The low cost and ease of operation of such a set-up make it ideally suited for basic practical training of university students in nuclear counting.

Specification

Scaling Factor: Selection of 10, 100 and 1,000 on glow tubes followed by a 4 digit mechanical register.

Resolution time: 250 μ sec. for pulse pairs.

Input Sensitivity: G.M. 500 mv; \sim ve 250 mv; \sim ve 5v/min. pulse width 1 μ sec.; Pulse Height Selection: \sim 5 to \sim 55v continuous.

High Voltage Supply: \pm 350 to \pm 1500v at 100 μ A.

Line Regulation: 0.02% for 1% mains variation.

Load Regulation: 0.1%.

Power Requirement: 230v A.C., 50 cps., 120W. Taps for 200-250v operation in 10v steps.

Facilities:

- (a) Scaling check by mains frequency.
- (b) \pm 15v scaled down output.
- (c) Provision for control by Electronic Timer.
- (d) Power to work Quenching Unit type PU630.

Accessories supplied:

- (a) One mains cable.
- (b) One UHF cable.
- (c) One phono plug.

Construction: Suitable for 19 in. relay rack mounting. Attractively finished in glossy black panel cabinet finished in silver ash hammer-tone at extra cost.

Dimensions: 482 x 177 by 350 d mm. Weight: 10.5 Kgms.

Other Instruments Manufactured Include:

Geiger Counting Systems,
Proportional Counting Systems,
Scintillation Counting Systems,
Gamma Ray Spectrometers,
Portable Geiger Counters,
Accurate Field Ratemeters,
Radiation Survey Meters,
Contamination Monitors,
Regulated High Voltage Units,
Regulated Low Voltage Units,
Binary and Decade Scalers,
Prescalers,
Linear and Log Ratemeters,
Non-Overload Pulse Amplifiers,
Single Channel and Multi-channel
Analysers,
Electronic Timers,
Slow and Fast Oscilloscopes,
Electrometer Amplifiers,
pH Meters,
Billion Megahmmeters,
Strain Gauge Amplifiers,
Non-Contact Thickness Gauges,
Nuclear Density Gauges,
Nuclear Moisture Gauges,
Geiger, Proportional and Scintillation Detectors,
Standard & Reference Sources,
etc., etc.

For further particulars please contact:

**TROMBAY ELECTRONIC INSTRUMENTS,
ATOMIC ENERGY ESTABLISHMENT TROMBAY, BOMBAY 71**

Low Priced Scientific and Technical books reprinted in India with the Assistance of the Joint
Indian-American Standard Works Programme.



ALLIED PACIFIC PRIVATE LTD.

Great Social Building, 60 Sr. P. Mehta Road, Bombay-1.

	Our Price	Original Price
*AN ILLUSTRATED LABORATORY MANUAL OF PARASITOLOGY by Raymond Cable	Rs. 7.50	Rs. 17.50
*LABORATORY MANUAL OF VERTEBRATE EMBRYOLOGY by Roberts Rugh	Rs. 7.50	Rs. 20.00
*ELEMENTARY BIOCHEMISTRY by Edwin T. Mertz.	Rs. 10.00	Rs. 27.50
*COMPARATIVE MORPHOLOGY OF VASCULAR PLANTS by Adriance S. Foster and Ernest M. Gifford, Jr.	Rs. 15.00	Rs. 47.50

Also available just off the presses Second Indian Edition of STATISTICS IN PSYCHOLOGY AND EDUCATION
by Henry E. Garrett, sensationally priced at Rs. 9.00.

Catalog will be mailed upon request.

*Full Cloth Hard Bound Edition

HILGER PHOTOELECTRIC UVISPEK SPECTRO PHOTOMETER FOR U.V. & VISIBLE

OVER 90 INSTRUMENTS IN USE IN INDIA

FEATURES

- * Entirely mains operated
- * Exceptional Stability even with fluctuating main supplies
- * Light Sources in permanent adjustment
- * Interchangeable silica and glass prisms
- * Flame, Fluorescence, Diffuse-Reflectance & Atomic Absorption Attachments available for above



For full details contact :

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LIMITED

India House,
Fort Street.
BOMBAY

Sunlight Building,
Asaf Ali Road,
NEW DELHI

B5 Gillanders House,
Post Box No. 2136
CALCUTTA

Dr. Shrimali Underlines Need to Reduce Wastage in Examinations

While inaugurating the two-day session of the Central Advisory Board of Education at Pachmarhi on May 6, Dr. K.L. Shrimali, Union Education Minister, said that it was a matter of immense satisfaction that educational expansion in India was taking place at a rapid pace. There were, however, certain weaknesses in our educational system which, he thought, must be removed if we were to make the maximum use of our limited resources.

In this context, he stressed the need to reduce the large number of failures "resulting in tragic waste of human resources at a time when we need them most for our nation-building activities". This wastage in education, he said, was inexcusable and it was high time that adequate measures were taken to eliminate it.

"If the examination system is defective, bold steps must be taken to replace it by a better one. We have enough data, material and trained personnel in our country now to reconstruct the examination system if there is a will to do it," the Minister said.

Referring to the large number of failures at high and higher secondary stages, Dr. Shrimali pointed out that there was a wastage of 40 to 50 per cent of our resources in both men and money. In one or two States this wastage was as high as 65 to 70 per cent. The high rate of failures in schools raised the per capita expenditure by at least a factor of 4, and the per capita expenditure at the universities and technical institutions was raised by at least a factor of 8.

Teachers' Responsibility

Dr. Shrimali said that the conscience of those who are in charge of the Education Departments as well as the universities must be aroused to eliminate this national waste. He thought the major responsibility for this wastage must be put squarely on the teaching staff of schools, colleges and universities. "The primary duty of teachers is to teach and when there is such a large percentage

of failures they must recognise this as their own failure," he added.

The resolution on the subject moved by Shri P. N. Kirpal, Education Secretary, viewed with great concern the "appalling" wastage of human resources and widespread frustration among students resulting from high percentage of failures in examinations at all levels, especially at school-leaving stage, and called upon the authorities to take adequate measures to meet the situation.

More Working Days

Dr. Shrimali felt the way the academic year and working days were organised left much room for improvement. "It puts a premium on less and less work,"

He suggested that the number of working days in schools and colleges be increased and the traditional syllabus considerably strengthened, so as to meet the exacting demands of a developing society and a rapidly expanding body of knowledge. The national emergency, he said, had highlighted the need for greater attention to physical education, the teaching of science, development of technical and productive skills, and the general upgrading of standards.

The Board later recommended 220 working days in a year with a minimum of 1,200 hours of instructional work in higher secondary schools.

The Central Advisory Board also emphasized the need for more evening colleges, and called upon the Ministry of Education to formulate a scheme for part-time courses as well.

From Our Readers

I have just received the second edition of University News and am very impressed with the progress and growth since the initial issue. I know it will be a valuable publication in educational circles.

—BARRY ZORTHIAN,
Deputy Chief, USIS, New Delhi.

I was indeed glad to see this new publication, and I hope it will be possible for my office to continue to receive copies of it. It is a most interesting and valuable publication.

—ARTHUR ROE,
Assistant Director, National Science Foundation, USA.

I find it interesting and useful in the extreme...

—H.R. AMBLER,
Scientific Adviser, British High Commission, New Delhi.

The publication of University News fills a long felt gap. Such an exhaustive news bulletin was a real necessity.

—L.R. DESHPANDE,
Osmania University.

These are but a few commendatory expressions from amongst the numerous we have received from our readers. We are glad to say that the Government of India has agreed to arrange supply of copies of *University News* to all Indian Embassies and High Commissions abroad.

—Editor

Special Features in This Issue

Extracts from Supreme Court's Judgement Page 7

Statement Showing Number of Students Registered for Various Examinations at 26 Indian Universities Pages 10-11

List of Engineering Colleges in India Pages 12-13

M.P.s' Concern at Cut in Education Budget

The Informal Consultative Committee of Members of Parliament on Education, at a meeting held in New Delhi on April 26 under the chairmanship of the Union Minister of Education, Dr. K.L. Shrivastava, considered the situation arising from the reduction of allocations for educational development plans for the current financial year and expressed its grave concern at the consequences of these reductions.

The committee unanimously resolved that the cuts imposed on educational development plans as a result of the national emergency should be restored, and in particular there should be no reduction in the programme of expansion and improvement of elementary education. The committee was further of the view that education should have the same priority as defence in the national plan.

Central Pay Scales in 24 Universities

The report of the Ministry of Education for the year 1962-63 reveals that 24 universities have agreed to introduce the central university scales for university teachers, thereby extending the benefit to about 3,500 teachers.

New Deal for College Teachers

There is a move to revise the pay scales for the teaching staff in the colleges so that the Principal of a college is placed in the grade of Rs. 700-40-100, the senior lecturer in the scale of Rs. 500-30-800, and other lecturers in the grade of Rs. 300-20-600.

Financial Assistance for Research

To encourage research work and original investigation in the universities and colleges, UGC has instituted a scheme for offering financial assistance to teachers engaged in research or learned work in Natural Sciences, Social Sciences or the Humanities.

Under the scheme, limited assistance will be provided for the purchase of equipment, chemicals, journals, reprints of papers and books etc., which are essential for research work but may not be available in the institution concerned.

Ford Foundation Grants for Indian Institutions

Ford Foundation of America on April 15 announced new grants amounting to over \$ 1.5 million covering some 10 institutions in India.

The All-India Institute of Medical Sciences, New Delhi, and the Topiwala National Medical College Bombay, will receive \$ 480,000 and \$ 125,000 respectively for acquiring new laboratory equipment and staff for expanded research in Reproductive Biology.

The Foundation announced \$ 877,000 in grants to four institutions for intensified research in the fields of economic and social development. The institutions are: Gokhale Institute of Politics and Economics (\$ 225,000); the Institute of Economic Growth (\$ 225,000); Bombay University (\$ 215,000); and the National Council of Applied Economic Research (\$ 212,000).

The Indian Council on World Affairs was granted \$ 75,000 for long-term research on economic problems involving Communist China's policy towards South and South-East Asia, and other economic, political and institutional problems.

The Allahabad Agricultural Institute will be receiving \$ 69,500 for advisory services of American agricultural implement engineers, and the American International School, New Delhi \$ 50,000 for school equipment and furnishings.

Also established was a \$ 62,000 grant for summer training seminars in management for senior-level Indian executives at the Massachusetts Institute of Technology.

Rockefeller Grants for Agricultural University

The Rockefeller Foundation on May 26 announced a grant of \$ 320,000 to Punjab Agricultural University, Ludhiana. The grant will help the university in the development of two experimental stations and in the procurement of laboratory equipment and library books.

Shri P.N. Thapar, Vice-Chancellor of the university, will receive a grant of \$ 9,150 for making a study of administrative organisation, teaching, and research in colleges in America, Europe, Japan, Hong Kong and Thailand.

Shri S.B.K. Hooja, Vice-Chancellor, Rajasthan Agricultural University, Udaipur, has also been offered a grant of \$ 9,150 for the same purpose.

Soviet Assistance to I.I.T. Bombay

A protocol was signed in New Delhi on May 16 by Shri G.K. Chandiramani, Joint Secretary, Ministry of SR & CA, and by Shri B. Romanov, Counsellor for Economic Affairs of the U.S.S.R. Embassy in India, to mark the completion of the delivery of scientific equipment costing Rs. 36 lakhs to the Indian Institute of Technology, Bombay, as a gift from the Soviet Union, under the Bilateral Agreement.

The Bilateral Agreement also provides for 25 Soviet professors to work at Indian technological institutes and for 50 Indian teachers to go to Soviet institutes of higher learning for advanced courses and research. The major part of this programme has also been fulfilled.

In addition to the above, the U.S.S.R. Government has supplied to the Indian Institute of Technology, Bombay, equipment worth over Rs. 1.2 crores under the United Nations Expanded Programme of Technical Assistance. Under this programme, sponsored by Unesco, services of 15 Russian professors and three translators have been placed at the disposal of the Bombay IIT. In addition, 22 Indian teachers have gone to the U.S.S.R. to receive technical training.

Donations for Universities

The Maharani of Gwalior, Mrs. Vijayraje Scindia, has donated Rs. 50 lakhs for the development of Vikram University, a report says.

The Maharani, in a public statement issued recently, also announced a donation of Rs. 20 lakhs from the Gangajali Fund and Rs. 10 lakhs on her own behalf for the new university proposed to be set up at Gwalior.

● Lucknow University has been given a grant of £4,000 by Wellcome Trust of Britain for a metabolic research unit at the university.

● Britain is to supply medical research equipment worth \$ 3,500 for the Medical College at Pondicherry under the Technical Cooperation Scheme of the Colombo Plan.

COMMONWEALTH UNIVERSITIES' CONFERENCE

Only 7 Indian V.Cs. to Attend

The Government of India has finally decided to restrict the number of Vice-Chancellors going to Britain for participation in the ninth quinquennial Congress of the Association of Universities of the Commonwealth, to be held in London from July 15 to 19, to seven only.

Thirty-one Indian universities are members of the Association, and invitations were received by all of them to depute four representatives each, including the Vice-Chancellor. An invitation was also extended to the Secretary of the Inter-University Board of India. In all 47 Indian delegates, including 27 Vice-Chancellors, registered their names for participation in the Congress.

Sterling Offer

In view of the foreign exchange difficulties India is facing, the Commonwealth Association arranged with the Leverhulme Trust of Britain to assist Indian delegates who could not obtain a currency cheque for use abroad by offering them sterling grants up to £100 each for their personal expenses while visiting Britain in connection with the Congress. The Trust set apart £5,000 to cover the expenses of the Indian delegation.

The Government of India, however, felt that even though the expenses of the Indian delegates during their stay in Britain would be met by the Conference sources, it would not be desirable to agree to a large number of persons going abroad for participation in the Congress. It was, accordingly, decided that the following seven Vice-Chancellors might attend the London meeting:

Dr. A.L. Mudaliar
Dr. C.D. Deshmukh
Dr. C.P. Ramaswami Aiyer
Shri D.C. Pavate
Dr. A.C. Joshi
Dr. T. Sen
Shri Badru-ud-Din Tyabji

Many Vice-Chancellors, as well as the Standing Committee of the

Inter-University Board of India, felt that Indian universities would stand to gain through a larger delegation participating in the Congress. The Government of India was, therefore, requested to reconsider its decision and increase then number of Vice-Chancellors allowed to proceed to Britain.

Recently the Government of India, on reconsideration of the case, has again decided that the strength of the Indian delegation should stand at seven, as decided upon earlier.

It has, however, been agreed that if any Vice-Chancellor happens to be in Britain at the time of the Congress, his name may also be included among those already approved. A specific reference to the Ministry will be necessary before such additions are made.

—At the request of Unesco, an Indian educational mission, led by Shri G. K. Chandiramani, Jr. Secretary, Ministry of SR&CA, has left for Liberia to help that Government formulate its long-term plans of educational development.

Visiting Professors

The Royal Society and the Leverhulme Trust announced on May 16 the first two appointments of visiting professors for India under the scheme announced by them last year.

The first is Professor R.D. Haworth, F.R.S., who retires this year as Firth Professor of Chemistry and Head of the Chemistry Department of Sheffield University. He will be at Madras University as a visiting professor in the field of Organic Chemistry from October this year to March 1964.

The second is Professor H.S. Lipson, F.R.S., Professor of Physics in the Faculty of Technology at Manchester University, who is to serve for the same period at Calcutta University as a visiting professor in the field of Physics.

The Royal Society in London also recently announced that Dr. T.E. Allibone, a distinguished British Scientist, will be visiting universities and other institutions in India and Pakistan next winter as the Rutherford Memorial Lecturer.



The President, Dr. S. Radhakrishnan, receiving an honorary degree of Doctor of Literature at the special convocation held at Tehran University on May 5.

Three-Language Formula

The State Education Ministers' Implementation Committee on the Three-Language Formula, at its meeting in New Delhi on April 15-16, underlined the need for uniform application of the formula by all States, subject to the minimum of variation to suit local conditions.

The committee, which was set up by the State Education Ministers' Conference held in October last year to examine this question in detail, stressed the need to ensure a high standard of proficiency in each of the three languages at the school stage, and recommended that the teaching of a language should be provided for not less than three years in a continuous course.

In the Hindi-speaking States, the committee pointed out, provision for teaching a classical language need not be in lieu of a modern Indian language, but may be as part of a composite course or as an elective subject. It recommended 100 per cent grants to these States to enable them to provide facilities for teaching modern Indian languages on the same lines as was being done at present for teaching Hindi in the non-Hindi States.

The arrangements for training Hindi teachers in the non-Hindi areas were reviewed and it was recommended that the Ministry of Education should appoint a committee to suggest measures for improvement and bringing about uniformity of standards.

Teaching of Asian Languages

In view of the importance and urgency of providing facilities in universities for the teaching of Asian languages, particularly Chinese and Tibetan, it is proposed to give central assistance to selected universities for strengthening or developing courses in these subjects.

Among the 33 institutions teaching foreign languages in India, eight provide facilities for training in Chinese. The institutions are: Universities of Allahabad, Banaras, Calcutta, Gorakhpur, Delhi, Visva-Bharati, the Indian School of International Studies, and the School of Foreign Languages, New Delhi.

Thirteen universities in India offer facilities for advanced studies and research in the Arabic Language. The universities which offer courses leading to the degree of M.A. in Arabic are: Aligarh, Allahabad, Banaras, Bihar, Bombay, Calcutta, Delhi, Lucknow, Madras, Patna, Osmania, Punjab, and Visva-Bharati.

The U.A.R. Government, under a cultural agreement, offers four scholarships every year for advanced study in the Arabic Language and Literature, Islamic Study and Islamic Philosophy.

Facilities for Service Personnel

Students joining the Armed Forces during the national emergency will be given every facility by various universities to complete their courses and take their examinations on their return, it is learnt. Any requests for migration arising directly out of parents joining the Armed Forces are also expected to receive sympathetic consideration.

Need for External Degrees

The central authorities feel that there is a definite need for providing external degrees by Indian universities to meet the demand of Indian population outside the country. It is, however, felt that provision for such degrees should be limited to a small number of selected universities. Delhi University is likely to try out this experiment.

Regional Institutes of Humanities

The Standing Committee on University Education, which was appointed last year by the Central Advisory Board of Education to make an assessment of university education in India and formulate plans for future development, has recommended the establishment of regional centres for the Humanities on the lines of the Regional Institutes of Technology. In an interim report to the Board, the committee says the regional centres may also be declared "institutions of national importance".

The Board, which is headed by Dr. C.P. Ramaswami Aiyar, Vice-Chancellor, Annamalai University,

is analysing replies received from various universities to a detailed questionnaire issued by it some time ago.

National Institute for Rural Education

A scheme is under consideration of the Ministry of Education for the establishment of a National Institute for Rural Higher Education which may function as a central organisation, with the various rural institutes as its components. This national institute will aspire to be recognised as a university, with the five-fold functions of teaching, research, extension, accreditation and examination.

At present there are 13 rural institutes in different parts of the country.

University Status for Two Institutions

The Tata Institute of Social Sciences and Kashi Vidyapeeth are likely to be recognised as institutions "deemed to be universities" under Section 3 of the UGC Act. The proposal to declare Gujarat Vidyapeeth as an institution deemed to be university is also being examined.

Compulsory Social Service

The Punjab Government is considering a proposal to make compulsory two months' social service in villages for university students. Under the proposed scheme students would have to obtain certificates from village panchayats to the effect that they had performed social service.

IMPORTANT ART BOOKS

A History of Fine Art in India & Ceylon, by Vincent Smith, Third Ed. revised by Karl Khandavalala. With 6 Colour & 194 Monochrome Plates. Rs. 80.00: Ajanta, Ellora & Aurangabad Caves, by Prof. R. S. Gupta & B. D. Mahajan. With 15 illus. in Colour, 58 Line Drawings & 334 in Monochrome Half-tone. Rs. 70.00: **The Handicrafts & Industrial Arts of India**, by R. J. Mehta. With 4 Colour & 150 Monochrome Plates. Rs. 49.00: **The Arts & Crafts of India & Pakistan**, by Shanti Swarup. With 6 Colour Plates, 212 Line & 515 Half-tone Illustrations. Rs. 44.00.

TARAPOREVALA

Publishers & Bookellers.

"Treasure House of Books"

210, Dr. D. Naoroji Road, Bombay 1.

American History and Literature Workshop

The United States Educational Foundation in India and the new American Studies Research Centre sponsored a "workshop" for teachers of American History and American Literature in Indian colleges and universities, in Mussoorie from May 28 to June 13. It was attended by 34 teachers from universities all over India and several American scholars.

This workshop was the second sponsored by the Foundation in connection with its assistance to Indian institutions for the introduction of papers in these two subjects. There are now 35 or more universities teaching one or both of these subjects.

U.S. Experts

For the leadership of the workshop, several outstanding American scholars came to India: Dr. Charles Boewe, Executive Secretary, American Studies Association, and Asst. Professor of English, University of Pennsylvania; Dr. William M. Gibson, Professor of English, New York University; Dr. William H. Cartwright, Professor and Chairman, Dept. of Education, Duke University; Dr. William B. Hesseltine, William F. Vilas Research Professor in American History, University of Wisconsin; and Dr. Wendell H. Stephenson, Professor of History, University of Oregon.

The workshop was also fortunate in having the assistance of Dr. Brom Weber of the University of Minnesota, who was visiting India in connection with the Chair in American Literature at Osmania University; and Dr. Reuel Denney, Director of the American Studies Institute of the University of Hawaii. Dr. Jay Gurian, Instructor in English, University of Minnesota, and Dr. Kelsie B. Harder, Professor of English, Youngstown University, who were already in India, were also on the staff.

The workshop consisted of lectures, discussions and short papers by both the American staff and the Indian participants.

Business Management Education

A seminar on planning business education and research in India was organised by Allahabad University from June 10 to 17 at Mussoorie.

Dean Alfred L. Seelye of Michigan State University (U.S.A.), in his inaugural address, said that the development of human resources, of which managerial talent is an important part, is a key factor in the industrialization of the present-day underdeveloped economies.

He then proceeded to spell out at length his ideas on the role of business schools in the changing environment. In the age of swift and significant changes, he said, the basic administrative processes remained the same, but the methods and tools had been changing to meet the challenge of what might be called a "third Industrial Revolution". He explained in detail the two new major breakthroughs in the field of management science, viz., the computer revolution and system analysis, which takes an integrated view of the firm as a whole as against its constituent departments.

Prof. A.N. Agarwala, director of the seminar, presented his views about the future needs of the country for managerial talent and emphasised that a large-scale drive was necessary to improve the quality as well as the quantity of business graduates.

Teaching of Jurisprudence

An all-India seminar on the teaching of Jurisprudence in India was held at Mount Abu from May 12 to May 21 under the auspices of Rajasthan University. The seminar was attended by judges and law teachers from different parts of the country and also by some foreign scholars. It was inaugurated by the Supreme Court Judge, Mr. Justice P.B. Gajendragadkar, and was presided over by the Governor of Rajasthan, Dr. Sampurnanand.

I.C.A.R. Seminar

The Indian Council of Agricultural Research held a seminar on teaching methods of Agriculture and Veterinary Sciences from June 11 to 15 at Simla. Subjects discussed included Practical Agriculture, Agricultural Engineering and Horticulture.

Anatomy Workshop

New methods and techniques for teaching Anatomy were demonstrated to medical students at a 13-day workshop seminar held at Bangalore from June 3 to 15. The seminar was sponsored by the Medical Council of India in collaboration with the United States Agency for International Development (USAID).

The Medical Council of India intends to cut short the period of teaching Anatomy from two years to one-and-a-half years and hopes that the new techniques will make this possible.

Dr. Russell T. Woodbourne, Head of the Department of Anatomy, University of Michigan (USA), delivered lectures and held practical demonstrations.

Refresher Course in Physics and Chemistry

The second refresher course for university teachers organised by the Trombay Establishment in collaboration with the Tata Institute of Fundamental Research started on May 1. About 20 teachers in Physics and 15 in Chemistry were selected for the six-week course, the object of which is to provide facilities to teachers to acquaint themselves with the latest progress in Nuclear Science.

Summer School in Theoretical Physics

About 50 research workers from all over India are attending a four-week summer school in Theoretical Physics at Dalhousie. The school will last till June 30, 1963.

The programme of the summer school includes a series of lectures on recent advances in Elementary Particle Physics, Body Problems and Plasma Physics, primarily for the benefit of young scholars who are actively engaged in research in these subjects.

—A summer school-cum-refresher course in Physics was organised at Jaipur, from May 6 to May 25 for the benefit of Physics teachers at Rajasthan University and its affiliated colleges. The Department of Mathematics will hold its summer school in May/June 1963 for the third consecutive year.

Another I.I.T.

It is understood that the Government of India proposes to introduce legislation to declare the College of Engineering and Technology, Delhi, as an "institution of national importance" and thus bring its status at par with the other four Indian Institutes of Technology. As the Indian Institute of Technology, Delhi, it will acquire an independent status and the right to confer its own degrees and diplomas, and to frame its own syllabi and academic policies.

The institute, when developed, will have a capacity of 1,250 undergraduate and 300 post-graduate students.

The British Government and British industry have agreed jointly to provide, over the years 1963-67, a further £ 400,000 worth of equipment for the institute. The British Government has also agreed to meet the expenses for providing 15 British professors during the same period.

New Course at Kharagpur

An M. Sc. course in Mathematics, based on the pattern recommended by the UGC Review Committee, is to be introduced by the Indian Institute of Technology, Kharagpur from August this year. Twenty-five per cent of those who are admitted will get scholarships of the value of Rs. 75 p.m. each plus free tuition.

Facilities for post-graduate work leading to diploma courses in specialised subjects, and research facilities leading to a Ph. D. degree are already available at the IIT. Those who have satisfactorily completed the M. Sc. course can get Rs. 250 per month to pursue further post-graduate research.

Junior Technical Schools

It is understood that the Minister for Scientific Research and Cultural Affairs has requested the State Chief Ministers to expedite the establishment of junior technical schools for turning out skilled and semi-skilled workers. Out of the 110 such schools planned for the third Plan period, 33 have already started functioning.

Technical Training Campus for Delhi

The Delhi Technical Education Committee of the Ministry of SR & CA has decided to develop the Kashmere Gate area in Delhi as a technical training centre. At present technical institutes are scattered all over the city.

The Delhi Polytechnic is proposed to be expanded and given an autonomous status, so that it forms the nucleus of the proposed campus. New courses in Commercial Art are to be introduced in the polytechnic and technical training facilities expanded.

There is also a proposal to start evening classes for Government and private employees who cannot attend day courses offered by the institute.

Technical Education in Maharashtra

The Directorate of Technical Education, Maharashtra State, held a conference of Principals of Government engineering colleges, polytechnics and technical institutions at Karad from May 23 to 26 to devise methods of bringing about effective co-ordination in technical education in Maharashtra. The conference decided to have a planned expansion of technical education and worked out requirements for increasing the number of seats in technical institutions.

Graduate Chemical Engineers.

In all 3,022 chemical engineers (2,767 degree-holders and 255 diploma-holders) were enrolled in the National Register of Scientific and Technical Personnel by the end of 1962. The number of chemical engineers enrolled in the Indians Abroad Section was 280.

An analysis of the age and employment of the 2,767 graduate chemical engineers shows that two-thirds of them are below 36 years of age and only 7% between 35 and 45. Nearly two-thirds are employed in industries, a bulk of these being employees in the private sector.

A course in Shudha Ayurveda will start in various Ayurvedic colleges in Gujarat from June this year. This information was given by the State Health Minister, Shri Mohan Lal Vyas, in a statement recently at Jamnagar.

A total of 410 seats would be available for the course. The mixed course in Ayurveda run by the colleges in Surat and Jamnagar would be abolished. Shri Vyas also indicated that a dental college would soon be opened in Ahmedabad with an intake of 30 students.

★

The Public Health Minister of Maharashtra State announced recently an increase of 230 seats in medical colleges in the State from the ensuing session. The present strength of seats in medical colleges in Maharashtra is 770.

★

The name of the Royal Faculty of Physicians and Surgeons, Glasgow, has been changed to "Royal College of Physicians and Surgeons of Glasgow". Consequently, the nomenclature of F.R.F.P.S. (qua surgeon) has been changed to F.R.C.S. (Glasgow) and of F.R.F.P.S. (qua physician) to either M.R.C.P. (Glasgow) or F.R.C.P. (Glasgow).

★

The Chief Minister of Punjab, addressing a function at the Gurdaspur Kala Kendra on April 22, stated that he would soon take steps for the establishment of a music university in Chandigarh on the lines of the Prayag Sangeet Samiti of Allahabad.

★

The foundation stone of Ahimsa Centre Library, estimated to cost about Rs. 14 lakhs and expected to stock manuscripts and books on Religion, Philosophy and Theosophy, was laid in New Delhi by the Prime Minister, Shri Jawaharlal Nehru. The library will have a research institute attached to it. It will take two years in getting ready.

SUPREME COURT HIGHLIGHTS TRUE ROLE OF EDUCATION

It was briefly reported in Vol. 1 No. 2 of University News that the Supreme Court on April 1 ruled that educational institutions did not fall within the definition of "industry" under the Industrial Disputes Act. The full judgement of the Supreme Court has now become available and a further report, alongwith a few extracts from the judgement, is given below, as the Court's observations have an important bearing on the function of educational institutions.

THE Supreme Court, in the case *University of Delhi versus Ram Nath*, recently declared that the work carried on by the university was not an industry under s. 2(j) of Sec. 25-F of the Industrial Disputes Act, 1947. The case arose out of two petitions filed against Delhi University and the Principal of Miranda House, a university college for women, by two of their employees, who were served with notices that their services would be no longer required because it had been decided to discontinue the college bus service which was running at a loss.

The employees of the university got an order passed from the Industrial Disputes Tribunal, directing the university and Miranda House to pay Rs. 1,050 to each of the employees as reinforcement compensation. The validity of this order was challenged before the Supreme Court by Delhi University on the ground that the work carried on by Miranda House was not an industry. The appeal of the university was accepted by the Supreme Court and the order of the Tribunal was set aside.

Place of Teachers

The judgement deals with various aspects of the case. On the question whether the concept of co-operation between teachers and their institutions being treated as similar to the co-operation between labour and capital fits in with the scheme of the Act, the Court says: "In our opinion, having regard to the fact that the work of education is primarily and exclusively carried on with the assistance of the labour and co-operation of teachers, the omission of the whole class of teachers from the definition described by s.2(s) has an important bearing and significance in relation to the problem which we are considering. It could not have been the policy of the Act that education should be treated as industry for the benefit of a very minor and insignificant number of persons who may be employed by educational institutions to carry on the duties of the subordinate staff."

Justice P.B. Gajendragadkar, who delivered the judgement, remarked: "Education seeks to build up the personality of the pupil by assisting his physical, intellectual, moral and emotional development. To speak of this educational process in terms of industry sounds so completely incongruous that one is not surprised that the Act has deliberately so defined workmen under s.2(s) as to exclude teachers from its scope. Under the sense of values recognised both by the traditional and conservative as well as the modern and progressive social outlook, teaching and teachers are, no doubt, assigned a high place of honour and it is obviously necessary and desirable that teaching and

teachers should receive the respect that is due to them. A proper sense of values would naturally hold teaching and teachers in high esteem, though power or wealth may not be associated with them... The position nevertheless is clear that any problems connected with teachers and their salaries are outside the purview of the Act, and since the teachers form the sole class of employees with whose co-operation education is imparted by educational institutions, their exclusion from the purview of the Act necessarily corroborates the conclusion that education itself is not within its scope."

No Profit Motive

At another place the judgement says: "It is well known that this organisation does not contribute capital of itself in carrying out its work of imparting higher education. It receives grants from the Central Government, from the University Grants Commission, and from charitable donors and charitable institutions. It also receives some income from tuition fees. But then, it seems very difficult to postulate that in the work of imparting education the University of Delhi contributes any capital as such. This work is carried on by the university with the co-operation of all its teachers and it would sound inappropriate to hold that this work is in the nature of a trade or business, or it amounts to rendering of service which can be treated as an industry under the Act. What we have said about the University of Delhi would be equally true about all educational institutions which are founded primarily for the purpose of imparting education."

"It is well known that the University of Delhi and most other educational institutions are not formed or conducted for making profit; no doubt, the absence of profit motive would not take the work of any institution outside s.2(j) if the requirements of the said definition are otherwise satisfied. We have referred to the absence of profit motive only to emphasise the fact that the work undertaken by such educational institutions differs from the normal concept of trade or business. Indeed, from a rational point of view it would be regarded as inappropriate to describe education even as a profession. Education in its true aspect is more a mission and a vocation rather than a profession or trade or business, however wide may be the denotation of the two latter words under the Act... because, essentially, the creation of a well-educated, healthy, young generation, imbued with a rational progressive outlook on life, which is the sole aim of education, cannot at all be compared or assimilated with what may be described as an industrial process. Therefore, we are satisfied that the University of Delhi and Miranda College for Women run by it cannot be regarded as carrying on an industry under s.2(j)."

Campus News

Parapsychology Centre

Andhra University has been chosen for locating a centre for research in Parapsychology. The scheme is being introduced on an experimental basis in the first instance for a period of 5 years. The continuance of the centre thereafter may be considered on the basis of the results achieved.

Prakrit Dictionary

A colourful ceremony to mark the publication of the Prakrit Dictionary (Prakrit Shabda Maharnava), compiled by the Prakrit Text Society, was held at Banaras Hindu University on March 30. Dr. Vasudeva Saran Agrawal, Principal, College of Indology, BHU, speaking on the occasion, stressed the need for establishing a national institution for compiling a dictionary of Sanskrit, Pali and Prakrit languages and literature. He said India was rich in its heritage of words and their meanings and an earnest endeavour should be made to record this wealth on scientific lines.

Research Publication

Visva Bharati has issued *Punthi-Parichaya Vol. III* by Dr. Panchanan Mandal, a research publication in the series of descriptive catalogues of Bengali manuscripts preserved at the university. Apart from a general description of 500 manuscripts, typical selections from 251 of them by 159 different authors have been quoted extensively and discussed. An elaborate discourse on a 15th century text by Kavichandra Misra has also been included.

Perception of Emergency in Rural Areas

The Social Education Organiser's Centre of Visva-Bharati undertook a study on the "Perception of National Emergency in Rural Areas" in collaboration with the National Institute of Community Development, Pandharpur Raj and Co-operation, New Delhi. The study has recently been completed and the final report has been sent to the Ministry concerned.



Dr. Karan Singh, Sadar-i-Riyasat of Jammu & Kashmir, at Rajasthan University, where he recently opened the new science block (Vigyan Bhavan). Others in the picture are: from l. to r.: Dr. R.T. Mehrotra, Dean of the Faculty of Science; Dr. Sampurnanand, Chancellor; and Dr. M.S. Mehta, Vice-Chancellor.

Hobby Workshop at Delhi Campus

Dr. C. D. Deshmukh, Vice-Chancellor, Delhi University, formally inaugurated on April 22 the Hobby Workshop which provides facilities for students in carpentry and wood turning, metal works, and photography.

An auto-cycle made by a student of B.Sc. Physics (Honours) class, exhibited on the occasion, earned a prize from the Vice-Chancellor.

Dr. Deshmukh, describing the utility of a hobby workshop, explained that by providing diversion and relaxation it helped the student in developing his intellectual capacity.

Central Universities' V. Cs. Meet

A conference of the Vice-Chancellors of the four central universities, namely, the Universities of Delhi, Aligarh, Banaras and Visva-Bharati, was held on April 5 at Varanasi under the chairmanship of Dr. D.S. Kothari, Chairman, UGC. The conference discussed common problems affecting the central universities.

Experiment in Self-help

On March 10, Visva-Bharati observed *Gandhi Punyaha*. The day is celebrated to commemorate the self-help experiment initiated at this university by Mahatma Gandhi. The servants were given their usual holiday and students and members of the staff at Santiniketan and Sriniketan volunteered for cleaning the campus, flushing the drains, cooking, serving and cleaning utensils.

- The Government of Jammu & Kashmir has appointed a committee under the chairmanship of Shri B.N. Ganguli, Pro-Vice-Chancellor, Delhi University, to examine the difficulties which Jammu & Kashmir University is facing owing to the location of the post-graduate departments at two places, that is, Jammu and Srinagar.
- Two new university hostels for boys, one at Srinagar and the other at Jammu, have been commissioned.
- Karnataka University plans to construct a museum building for its Department of History at a cost of Rs. 2.50 lakhs.

COURSES OF STUDY

Aligarh University proposes to set up a separate *Department of Sanskrit* from the present composite Department of Hindi and Sanskrit.

Banaras Hindu University is going to introduce M.S. and M.D. Courses in the College of Medical Science.

Calcutta University has started a post-graduate medical college which offers M.Sc. (Medical) courses in Anatomy, Physiology, Pharmacology and Pathology, including Bacteriology. It also offers diploma courses in Basic Medical Sciences.

Delhi University : A two-year post-graduate course in *Operations Research* is to start from July 16 this year.

B.A. (Honours) course in Geography and a one-year post-graduate diploma course in *Geography* have been instituted this year.

A combined Honours course in *Social Sciences* (Sociology, Political Science and Economics) will start from the next session (1964-65).

The university has instituted the M. Litt. degree in *Buddhist Studies*. The course is of two years and will start from the current academic year.

B.A. (Honours) and **M.A.** courses in *Bengali* will start from the new academic session.

Part-time evening courses of one year's duration in modern languages, i.e. Bengali, Gujarati, Marathi, Tamil, Telugu, Malayalam and Kannada, will start from July 1963.

Gurukul Kangri Vishwavidyalaya : M.A. classes in Sanskrit, Philosophy, Ancient Indian History, Psychology and Mathematics are proposed to be started from July 1963. Those M.A. students who submit theses will be awarded the diploma of Vidhvachaspati in addition.

Jammu & Kashmir University : Two more post-graduate departments, namely, those of History and Political Science, are being opened this year at Jammu and Srinagar respectively.

Kashi Vidyapeeth intends to conduct a post-graduate course in *Applied Sociology*.

Mysore University : Post-graduate diploma courses of one year's dura-

tion in the following medical subjects have been recently instituted :

Dermatology ; **Physical Medicine and Rehabilitation** ; **Venereology** ; **Child Health** ; **Radiology** ; **Anaesthesia** ; **Oto-Rhino-Laryngology** ; **Obstetrics and Gynaecology** ; and **Orthopedics**.

A post-graduate course leading to the Master's degree in Engineering in *Soil Mechanics* and *Foundation Engineering*, of one-and-a-half year's duration, has been instituted from April 1, 1963.

Osmania University : A one-year course in *Applied Geology & Geophysics*, leading to the degree of M. Tech., is being instituted from the academic year 1963-64 for students who have taken a Master's degree in Geology.

Punjab University is starting post-graduate teaching in the subjects of English, Punjabi, Economics, Mathematics, Chemistry and Physics from July 1963.

Rajasthan : The Government of Rajasthan has opened a College of Nursing in Jaipur, to impart courses leading to the *B.Sc. (Nursing)* degree of Rajasthan University. The opening of this college has been made possible by American assistance.

The university will start evening courses in *Steno-typing* (both Hindi and English) from the next academic session to meet the shortage of properly trained stenographers in the State.

ACCELERATION OF COURSES

Lucknow University : The duration of the M.B.B.S. course has been reduced to four-and-a-half years from the session 1963-64.

Sri Venkateswara : In view of the national emergency, acceleration in the fourth and fifth years of B.E. has been made. Accordingly, these classes commenced from May in the Engineering College, Tirupati, and the Government College of Engineering, Anantapur. University examination for these students will be held early in December 1963.

The six-month internship for medical graduates has been abolished and instead one-year housemanship introduced.

ADMISSIONS

Lucknow University : An increase in the number of admissions by 25% in the M.B.B.S. first year class at the K.G. Medical College, Lucknow, and the G.S.A.M. Medical College, Kanpur, has been approved from the session 1963-64.

EXAMINATIONS

Jammu & Kashmir University will start holding bi-annual examinations for all faculty examinations from the year 1964.

A candidate who has passed his M.A. or M.Sc. examination from the university in the third division will be allowed to reappear in the same subject in order to improve his division. This concession will also be available to candidates having passed from any other recognised university, with the previous permission of the syndicate.

Punjab University has introduced internal assessment in the Faculties of Science, Arts & Social Sciences, Languages, and Business Administration & Commerce, and has earmarked 20% of the marks in a paper for this purpose. These marks will cover the student's classwork, homework and house examination records. A student who fails to obtain 50% marks in the internal assessment shall not be eligible for the university examination.

Students failing in one paper in Part I or Part II of the M.A. examination shall be declared to have failed in that paper only, provided they get 50% marks in the other three papers taken together. Such students will be permitted to reappear in the paper in which they fail in order to qualify for the examination.

MEDIUM OF INSTRUCTION

From the academic session beginning this year, instruction up to degree level in Economics, History, Civics and Political Science will be imparted in the colleges affiliated to Punjab University through the medium of Punjabi. The students, however, will have the option to answer their question papers in English or Punjabi or Hindi.

Number of Students Registered for Various Exa

	P. U. C. Arts	P. U. C. Science	B. A.	B. Sc.	B. Com.	M. A.	M. Sc.	M. Com.	B. Ed.	M. Ed.
1. Agra	—	—	11208	4203	2211	5776	1112	549	2881	45
2. Aligarh	307	461	173	223	28	443	125	34	91	25
3. Andhra	16,1435	—	2,676 50 (H)	5,464 93 (H)	—	236	156	—	617	9
4. Banaras	105	382	1227	293	264	1305	164	24	95	12
5. Bhagalpur	6248	2649	4491 1176 (H)	688 87 (H)	1247	410 ¹	35	—	—	—
6. Bombay	—	—	3561	3947 ^a	817	755	443	213	273	26
7. Calcutta	—	—	29722	7371 ^a	10798	—	9(Bio.)	—	—	—
8. Delhi	612 ²	98 ²	3025 983 (H)	397 ^a 200 (H)	372	1469 ⁴	127	—	146	15
9. Jadavpur	79	22	55 (H)	57 (H)	—	—	—	—	—	—
10. Jodhpur	559	457	477	144	130	139	33	26	163	—
11. Karnatak	4013	3266	770 ^a	362	432	230	171	61	241	52
12. Kerala	24310 ⁵	—	2330	6540	—	402	382	—	—	—
13. Kurukshetra	151	99	—	—	—	24	24	—	—	—
14. Madras	8344	4175	1701 490 (H)	483 53 (H)	—	—	—	—	—	—
15. M.S. Baroda	1342	660	348	206 ⁶	424	109	143	33	107	21
16. Osmania	4752	1792	3905	3245	1456	326	126	15	555	22
17. Poona	13418	6867	3914 ^a	1522 8 (H)	1372	711	281	68	636	114
18. Punjabi	305	113	795 27 (H)	128	208	—	—	—	193	11
19. Rajasthan	6738	3142	7487	842	889	1368	243	143	596	17
20. Rajasthan Agri.	—	—	—	—	—	—	—	—	—	—
21. Roorkee	—	—	—	—	—	—	25	—	—	—
22. S.V. Vidyapeeth	608	1267	151	124	148	65	104	16	102	9
23. Saugar	—	—	3053	938	566	788	178	41	659	100
24. S.N.D.T.	3401	—	410 ^a	34 ^a	—	315	—	—	244	51
25. Sri Venkateswara	3962 ¹	—	375	595	74	126	85	—	—	—
26. Vikram	—	—	3647	495	781	1257	361	282	478	54
Total	95,597	25,450	88,229	38,742	22,217	16,264	4,327	1,505	8,077	538

¹ Except English, Philosophy and Political Science ² Two years course students only ³ Qualifying examination ⁴ Including M. Com. ⁵ Loc. Abbreviations—N.A. : Not Available ; H : Honours ; Bio. : Biochemistry.

nations (1963-Final) at 26 Indian Universities

L. B.	LL. M.	B.Sc. (Ag.)	M.Sc. (Ag.)	M. B. B. S.	M. D / M. S.	B.V.Sc. & A.H.	M.V.Sc. & A.H.	B.E./B.Sc. (Engg.)	M.E./M.Sc. (Engg.)	B. Tech.	M. Tech.
1176	26	1716	238	84	41	110	41	66	—	28	15
122	3	—	—	—	—	—	—	118	—	—	—
81	7	292	—	247	198	—	—	492	—	33	64
230	N.A.	70	32	N.A.	—	—	—	480	—	174	—
225	—	289	—	—	—	—	—	422	—	—	—
1019	86	—	—	187	168	42	27	214	—	211	8
384	—	—	—	1313	—	46	—	693	59	210	108
235	3	—	—	103	50	—	—	247	—	50	—
—	—	—	—	—	—	—	—	405	—	—	—
63	—	—	—	—	—	—	—	126	—	—	—
223	3	108	32	143	—	—	—	381	—	—	—
—	—	59	—	98	—	58	—	402	—	—	—
—	—	—	—	—	—	85	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
124	—	—	—	46	14	—	—	379	5	60	—
358	22	100	14	338	—	68	—	343	3	31	15
175	20	183	16	59	21	—	—	516	38	18	—
—	—	—	—	193 ⁶	—	—	—	475	—	—	—
260	4	50	—	113	34	—	—	170	10	—	—
—	—	173	19	—	—	60	—	—	—	—	—
—	—	—	—	—	—	—	—	248	132	16	—
—	—	192	1	—	—	—	—	291	11	—	—
396	—	75	10	—	—	—	—	111	—	—	18
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	351	—	—	—
462	—	126	55	315	144 ⁷	47	13	222	—	—	—
5,533	174	3,433	416	3,229	670	516	81	7,154	268	833	224

² U.C. Science ⁴ First and Final ⁷ Includes D.C.H. ^{*} Special & General ⁹ Includes Home Science

Engineering Colleges in India

Name of Institution	Courses of Study	Sanctioned Seats	Duration of Course (years)	Name of Institution	Courses of Study	Sanctioned Seats	Duration of Course (years)
ANDHRA PRADESH				23. Lukhdhirji Engineering College, Morvi	C, M, E	120	3
1. Engineering College, Anantpur	C, M, E	152	5	24. Sardar Vallabhbhai Regional College of Engineering and Technology, Majura Gate, Surat	C, M, E	60	3
2. College of Engineering, Osmania University, Hyderabad	C, M, E, Mi	235	5	25. Birla Vishvakarma Mahavidyalaya, Vallabh Vidyanagar, Dist. Kaira	C, M, E	240	4
*3. Department of Chemical Technology, Osmania University, Hyderabad	Ch.	60	5	JAMMU & KASHMIR			
4. College of Engineering, Kakinada	C, M, E	120	5	26. Regional Engineering College, Nazim Bagh, Srinagar	C, M, E	250	5
5. Sri Venkateswara University College of Engineering, Tirupati	C, M, E	120	5	KERALA			
*6. Andhra University Colleges, Department of Technology, Waltair	Ch.	60	5	27. Engineering College, Kothamangalam	C, M, E	120	5
7. University College of Engineering, Waltair	C, M, E	120	5	28. Regional Engineering College, Kozhikode	C, M, E	230	5
8. Regional Engineering College, Warangal	C, M, E	250	5	29. N.S.S. College of Engineering, Palghat	C, M, E	120	5
ASSAM				30. Thangal Kunju Musaliar College of Engineering, Quilon	C, M, E	120	5
9. Assam Engineering College, Gauhati	C, M, E	120	4	31. Engineering College, Trichur	C, M, E, Ch.	150	5
10. Jorhat Engineering College, Jorhat	C, M, E	120	4	32. College of Engineering, Tilvandrum	C, M, E, A	240	5
BIHAR				MADHYA PRADESH			
11. Engineering College, Bhagalpur-3	C, M, E	120	4	33. Maulana Azad College of Technology, Bhopal	C, M, E	250	5
12. Indian School of Mines, Dhanbad	Mi	90	4	34. Madhav Engineering College, Gwalior	C, M, E	120	5
13. Regional Institute of Technology, Jamsbedpur	C, M, E, Met	250	5	35. Shri Govindram Seksaria Technological Institute, Indore	C, M, E	180	5
14. Muzaffarpur Institute of Technology, Muzaffarpur	C, M, E	120	4	36. Government Engineering College Jabalpur	C, M, E	240	5
15. Bihar College of Engineering, Patna	C, M, E	120	4	37. Government College of Engineering and Technology, Raipur	C, M, E, Ch, Mi, Met.	150	5
16. Birla Institute of Technology, Mesra, Ranchi	C, M, E	270	4	38. Samrat Ashok Technological Institute, Vidisha	C, M, E	120	5
17. Bihar Institute of Technology, Sindhri	C, M, E, Ch, Met	270	4	MADRAS			
DELHI				39. College of Engineering, Annamalai University, Annamalai Nagar	C, M, E	180	5
18. College of Engineering and Technology, Hansi Khas, New Delhi	C, M, E, Ch.	220	5	40. Department of Technology, Annamalai Nagar	Ch.	60	5
19. Delhi Polytechnic, Delhi	C, M, E, Ch.	110	4	41. Coimbatore Institute of Technology, Coimbatore Aerodrome Post	C, M, E	120	5
*20. School of Planning and Architecture, New Delhi	A	30	5	42. Government College of Technology, Coimbatore	C, M, E	120	5
GUJARAT				43. P.S.G. College of Technology, Peelamedu, Coimbatore	C, M, E	120	5
21. L.D. College of Engineering, Ahmedabad	C, M, E	300	3				
*22. Faculty of Technology and Engineering, Baroda	C, M, E, A	280	4-5				

*44. Alagappa Chettiar College of Engineering and Technology, Karaikudi	C, M, E	120	5	ORISSA			
45. Alagappa Chettiar College of Technology, Madras	Ch, A	80	5	70. University College of Engineering, Burla	C, M, E	180	4
46. College of Engineering, Guindy, Madras	C, M, E, Mi	235	5	71. Regional Engineering College, Rourkela	C, M, E, Ch, Met.	250	4
47. Indian Institute of Technology, Madras	C, M, E, Ch, Met	267	5	PUNJAB			
48. Thiagarajar College of Engineering, Tirparankundram	C, M, E	120	5	72. Chandigarh College of Architecture, Chandigarh	A	30	5
MAHARASHTRA				73. Department of Chemical Engineering and Technology, Punjab University, Chandigarh	Ch	60	4
49. College of Engineering, Aurangabad	C, M, E	120	3	74. Punjab Engineering College, Chandigarh	C, M, E	240	4
*50. Department of Chemical Technology, University of Bombay, Bombay-19	Ch	60	4	75. Guru Nanak Engineering College, Ludhiana	C, M, E	120	4
*51. Indian Institute of Technology, Powai, Bombay	C, M, E, Ch, Met	325	5	76. Thapar Institute of Engineering & Technology, Patiala	C, M, E	120	4
52. Sir J.J. College of Architecture, Bombay	A	80	5	RAJASTHAN			
*53. Victoria Jubilee Technical Institute, Matunga, Bombay	C, M, E	140	3	77. Mugneeram Bangur Memorial Engineering College, Jodhpur	C, M, E, Mi	250	5
54. College of Engineering, Karad	C, M, E	120	3	78. Birla College of Engineering, Pilani	C, M, E	180	5
55. Government Polytechnic, Nagpur	A	30	5	UTTAR PRADESH			
*56. Lakshminarain Institute of Technology, Nagpur	Ch	36	4	79. Engineering College, Daynabagh, Agra	M, E	30	4
57. Regional College of Engineering, Nagpur	C, M, E	120	3	80. College of Engineering and Technology, Muslim University, Aligarh	C, M, E	120	4
*58. College of Engineering, Poona	C, M, E, Met	252	3	81. Motilal Nehru Engineering College, Allahabad	C, M, E	110	4
59. Walchand College of Engineering, Vishrambag, Sangli	C, M, E	120	3	*82. H.B. Technical Institute, Nawabganj, Kanpur	Ch	30	4
MYSORE				83. Indian Institute of Technology, Kanpur	C, M, E, Ch, Met	100	5
60. B.M. Sreenivash College of Engineering, Bangalore	C, M, E	120	5	84. Roorkee University, Roorkee	C, M, E	240	4
*61. Indian Institute of Science, Bangalore	E-Met	90	3-2	*85. College of Mining and Metallurgy, B.H.U., Varanasi	Mi, Met	100	4
62. University College of Engineering, Bangalore	C, M, E	210	5	86. Department of Chemical Engineering and Chemical Technology, B.H.U., Varanasi	Ch	30	4
63. B.D.T. College of Engineering, Davangere	C, M, E	120	5	87. Engineering College, Banaras Hindu University, Varanasi	C, M, E	270	4
64. Hyderabad Karnatak Education Society's Engineering College, Gulbarga	C, M, E	120	3	WEST BENGAL			
65. Malnad College of Engineering, Hassan	C, M, E	120	5	*88. University College of Engineering and Technology, Jadavpur University, Calcutta	C, M, E, Ch	330	5
66. B.V. Bhoomraddi College of Engineering and Technology, Hubli	C, M, E	120	5	89. Department of Applied Chemistry, Calcutta University, Calcutta	Ch	36	4
67. Manipal Engineering College, Manipal	C, M, E	240	5	90. Regional Engineering College, Durgapur	C, M, E, Met	250	5
68. National Institute of Engineering, Mysore	C, M, E	120	5	*91. Bengal Engineering College, Sibpur, Howrah	C, M, E, Mi, Met-A	360	5-6
69. Karnataka Regional Engineering College, Srirahkal	C, M, E	252	5	92. Jalpaiguri Engineering College, Jalpaiguri	C, M, E	120	5
				*93. Indian Institute of Technology, Kharagpur	C, M, E, Mi, Met, A	203	5

Abbreviations: C=Civil Engineering, Ch=Chemical Engineering, M=Mechanical Engineering, Mi=Mining, E=Electrical Engineering, Met=Metallurgy, A=Architecture.

N.B.—The list excludes Pharmacy and technological subjects other than those mentioned above.

* These institutions also offer courses leading to the post-graduate degree or diploma in one or more subjects mentioned.

South-East Asian Educational Body Meets

The fourth general conference of the Association of South-East Asian Institutions of Higher Learning (ASAHL) was held in Bandung, Indonesia, from April 14 to 19. Air-Marshall M.M. Vejjant Rangsrith, of Thailand, presided.

ASAHL, founded in 1956 as a free, voluntary association, has 26 member-institutions in eight countries of South-East Asia, namely, Burma, Hong Kong, Indonesia, Malaya, the Philippines, Singapore, Thailand and Viet-Nam. It has its headquarters in Bangkok, Thailand.

The conference, which was inaugurated by Prof. Ir. Tujib Hadiwidjaja, Indonesia's Minister for Higher Education in Science and Research, was attended by 30 accredited representatives of 16 member-institutions and some observers.

Observer from India

For the first time an Indian representative was invited, and Dr. B.D. Laroia, Secretary, Inter-University Board of India, attended the conference as an observer. He was invited to address the conference twice during the four-day session. In these addresses, Dr. Laroia conveyed the greetings of Indian universities to sister institutions in South-East Asian countries and expressed the hope that as a result of personal contacts closer academic relationship will grow between India and South-East Asia.

During his talks with ASAHL members, Dr. Laroia explained in brief the structure and functions of the Inter-University Board of India, the role it plays in co-ordinating activities of Indian universities, and offered to assist in the establishment of closer liaison between the ASAHL institutions and the members of IUB.

The delegates evinced keen interest in the information conveyed to them regarding various summer schools, seminars and refresher courses currently being held in India, which could as well be utilised by

interested persons in South-East Asian countries.

The following papers were read at the conference :

A University's Place in Hong Kong's Educational System—by Prof. Sir Lindsay Ride, Vice-Chancellor of Hong Kong University.

Medical Education in Thailand—by Prof. Svasti Daengsvang, Rector of the University of Medical Sciences, Thailand.

Some Basic Problems of Higher Education in Indonesia—by Prof. S.I. Santoso, Dean, Faculty of Psychology, University of Indonesia.

The Equivalence of University Degrees in South-East Asia—by Dr. Enrique T. Virata, Executive Vice-President of the University of the Philippines.

The conference decided that the following seminars should be held during the next two years :

Philosophy of South-East Asia—At Manila in September 1963.

University Organisation and Administration—at Hong Kong in November 1963.

Customary Law—at Singapore in February 1964.

Agricultural and Veterinary Sciences—at Bogor (Indonesia) in July 1964.

Mathematical Education—at Dalat in November 1964.

Extra-mural Activities—at the time of the fifth general conference of ASAHL, proposed to be held in Hong Kong late in 1964 or early in 1965.

Col. Dr. Sajarif Thajeb, President of the University of Indonesia, and Prof. Sir Lindsay Ride, Vice-Chancellor of the University of Hong Kong, were elected the new president and vice-president respectively of ASAHL.

Popularity of Educational Television.

An experiment in televising courses leading to a university degree, launched last year by the French-language University of Montreal and Radio-Canada, has proved so popular among French Canadians

that during the forthcoming academic year the number of courses is to be increased from three to seven.

Last year 1,110 students enrolled for the courses, of which 68% took the examination and of these 85% were successful. Over 3,000 copies of mimeographed summaries of the courses were sold to the public by the university, indicating a widespread interest in the experiment.

This year Radio-Canada will broadcast seven courses covering subjects like Anthropology, French Grammar and Literature, Physics, Human Geography, Political Economy and History of the Theatre.

President Kennedy Meets Foreign Students.

More than 800 students, mostly from Asia, met President Kennedy in a spring lawn party at the White House on May 8. This was the third reception for foreign graduate students since Mr. Kennedy took office.

The President told the students : "I can think of no area where you can put your powers to more excellent use and produce more personal and general happiness than in the field of national service, either as politicians or as technicians, to help advance the welfare of your people."

The President cited recent statistics showing that young men were stepping into positions of importance in many countries and said that "this revolution of youth offers the brightest promise that all of you will have an opportunity to put this learning to work in a constructive way".

► The University of Panjab, Lahore (Pakistan), invites applications for one post of Reader in Statistics, Grade : Rs. 600-1150 plus usual allowances. Higher start admissible. Qualifications : M.A./M.Sc. Statistics (1st Class) plus 5 years' experience in teaching post-graduate classes and in research. Applications to reach the Registrar by 1-9-1963.

Scholarships and Awards

Fellowships and Scholarships for Technical Studies

The Technical Division of the Ministry of Scientific Research & Cultural Affairs administers a number of scholarships and fellowships in Science and Technology under its various schemes. Some of these are:

Research Fellowships in Sciences: Eighty fellowships, each of the value of Rs. 400 p.m., are awarded each year to candidates who have obtained a doctorate degree in Science and are not more than 30 years of age. Applications are invited through the universities/institutions where the candidates propose to work. The fellowships are tenable for three years, but can be extended to five years in special cases.

Fellowships in Technology: These fellowships, each of the value of Rs. 400 p.m., are awarded to students who possess a Master's degree in Engineering or Technology and are registered for a Ph. D. degree.

Research Training Scholarships: Eight hundred scholarships, each of the value of Rs. 250 p.m., are available every year to candidates who possess at least a second class M. Sc. degree and are engaged in research, or are B. Sc. (Hons.) graduates registered for a doctorate degree and have spent at least one year in research. The scholarships are tenable for three years (extendable to four years) and are allotted to universities and other research institutions in proportion to the training facilities available. Selections are made primarily by the institutions concerned, subject to the approval of the Ministry.

Post-graduate studentships: These studentships, each of the value of Rs. 250 p.m., are awarded to students admitted to non-university institutions conducting post-graduate courses. The maximum number of students eligible for the awards in each course per institution is 12, of which two places are reserved for teachers.

Engineering: Scholarships of Rs. 250 each are available to all students

registered for post-graduate courses in Engineering and Technology.

Merit-cum-Means Scholarships Scheme: 2,130 scholarships (1,395 of Rs. 75 each for degree courses and 725 of Rs. 50 each for diploma courses) were instituted during 1962-63. The scholarships are allotted to individual institutions in proportion to their admission capacity. Candidates who have secured first class in the qualifying examination and whose total family income does not exceed Rs. 625 p.m. (for a family of five members) are eligible for the award. The scholarships are tenable for one year in the first instance, but are renewable for candidates securing first class in their annual examination.

Scholarships at Centrally-sponsored Institutions: Provision has been made at the four IITs at Kharagpur, Bombay, Madras, and Kanpur; the various Regional Engineering Colleges; the College of Engineering and Technology, New Delhi; the Delhi Polytechnic; and the Indian School of Mines, Dhanbad for the award of scholarships, each of the value of Rs. 75 p.m., to 25% of the students in undergraduate courses. The Delhi Polytechnic, however, awards a number of scholarships for diploma courses also. All scholarship holders are exempted from payment of tuition fees. Some of the scholarships are awarded on the basis of merit and the rest on the basis of merit-cum-means. Selections are made by the institutions themselves.

Stipends for Practical Training: At various industrial establishments, Government technical departments, and other organisations, 2,200 training places are available for practical training of graduates and diploma-holders for periods varying between one and two years. It is expected that at least 250 additional places will be secured each year. The value of the stipend for a graduate is Rs. 150 p.m. and that for a diploma holder Rs. 150 p.m.

Nuclear Science Fellowships

The Atomic Energy Commission has decided to award a few fellowships for study and research in Nuclear Physics and Cosmic Rays at the various universities and research institutions in India. The senior fellowship is of the value of Rs. 400 per month and the junior fellowship of Rs. 250 per month.

The fellowships are tenable for a period of two years and may be extended for a further period of one year in special cases.

UNIVERSITY NEWS is issued every alternate month. Price per copy: 50 nP. plus postage. Annual subscription: Rs. 1/5/6 (by surface-mail); Rs. 6/5/8 (air-mail). Remittance should be made by Money Order/Postal Order/Crossed Cheque (adding the bank commission if the cheque is realised out of Delhi) in the name of the Editor, UNIVERSITY NEWS, c/o the Inter-University Board of India, Rouse Avenue, New Delhi-1. Please note that we normally do not send the journal per VPP.

George Pepler Award

Shri Ram Lal Setya, an Indian studying for a diploma in Civic Design in the Department of Architecture at Edinburgh University, is the first recipient of the George Pepler International Award for 1963, open to students all over the world interested in Architectural Planning and related subjects.

The fund from which the award is made was established in 1962 by Lady Pepler in memory of her husband, Sir George Pepler, the noted architect and writer on town and country planning, who died in 1959.

U.S. Society's Award

Dr. T. Ramasarma, of the Department of Bio-Chemistry, Indian Institute of Science, Bangalore, has been given a grant-in-aid by the Society of the Sigma XI (U.S.A.) and its associate organisation, the Scientific Research Society of America, to assist him in his study of "Quinones and Embryonic Development".

Sigma XI and RESA each year make a number of grants to promising scientists at critical points in their research careers.

BIOCHEMISTRY IN INDIAN UNIVERSITIES

Review Committees' Report

Review committees on various subjects were appointed by UGC in 1959 for examining courses of study and teaching and research facilities available at universities and colleges and to recommend the lines on which further improvements could be made. A note on the report of the Review Committee on Mathematics appeared in Vol. 1 No. 1 (p. 12) of *University News*. Recently, the report of the Review Committee on Biochemistry has also become available.

The late Dr. H.C. Guha presided over the deliberations of the committee, and Dr. B.D. Laroia, then Development Officer (Science), acted as member secretary. The other members of the review committee were: Dr. S.H. Zahir (then Director of the Regional Research Laboratory, Hyderabad); Dr. V. Jagannathan (NCL, Poona); Dr. P.S. Krishnan (University of Lucknow); Dr. B. Mukherji (CDRI, Lucknow) and Dr. P.S. Sharma (IIS, Bangalore).

Rapid Development

Biochemistry is a relatively young scientific discipline, but it has made phenomenal progress during recent years. Although only a few Indian universities boast of independent departments of Biochemistry, its advancement has been fairly rapid over the last decade. The number of papers published in 1958 rose to 453 from 244 published in 1956.

The review committee's report gives an analysis of the present position of biochemical studies and research in India, and suggests certain lines for future development. The committee, explicitly, does not approve of the establishment of undergraduate courses in Biochemistry and, consequently, has prepared the model syllabus for postgraduate studies only. The report also deals with the nature of financial assistance required to develop biochemical studies and research in Indian universities.

From its various recommendations, the following may be mentioned:

(i) The Department of Biochemistry should enjoy an indepen-

dent status as a department of study.

(ii) The courses in the first years of M.Sc. should cover basic principles of Biology and Physiology alongwith some biochemical subjects.

(iii) Each centre for training should normally admit only 10 to 12 students a year and only those centres should be allowed to develop where Chemistry departments are well developed.

(iv) To encourage research, facilities should be developed on a regional basis, so that such centres could provide adequate facilities in almost all major branches of Biochemistry. When more funds become available, these facilities should be extended to all centres of training.

(v) Where there are no independent departments of Biochemistry, a biochemist of the rank of a reader should be attached to the departments of biological sciences.

(vi) The introduction of a system of teaching assistantships on a fixed remuneration and encouraging senior Ph. D. candidates to take up such studentships is highly commendable.

(vii) Short-term courses should be provided in certain specialised areas of knowledge.

Memorial to Founder of Educational Trust

Dr. K.L. Shrimali, Union Education Minister, unveiled the bust of the late Sardar Dyal Singh Majithia in the portico of the Dyal Singh College, New Delhi, on April 28.

Dr. Shrimali paid homage to the great philanthropist, and said that the task of spreading education should be primarily the responsibility of society, although a democratic government striving for a welfare State would have to take an active interest in educational development. He was happy to note that the tendency of relying too much on Government assistance was now on the wane.

Dewan Anand Kumar, Honorary Secretary of the Dyal Singh College Trust Society and former Vice-Chancellor of Punjab University and member of UGC, recounted the magnificent contribution made by Sardar Dyal Singh to the spread of education in Punjab.

The Dyal Singh institutions owe their existence to the public spirit and vision of the late Sardar Majithia who, in 1895, donated his entire princely estate for the creation of three Trusts in Punjab: The Dyal Singh College Trust Society, the Dyal Singh Library Trust, and the Tribune Trust.



Bust of Sardar Dyal Singh unveiled.

From l. to r.—Shri B. R. Bowry, L. Feroze Chaudh, Shri R. K. Chhabra, Dewan Anand Kumar, Dr. K. L. Shrimali, Col. Amir Chaud, Dr. V. S. Puri, Dr. B. D. Laroia and Shri K. L. Malhotra.

I.U.S.B.'s Appeal for Harmony in Sports

In an earnest appeal issued at its 23rd annual meeting, held at Jadavpur University on April 22-23, the Inter-University Sports Board of India called upon all participating and organising universities to conduct Inter-University Tournaments in a spirit of mutual co-operation and sportsmanship. The appeal came in the form of the main observation made by the Board on the reports received from the organising secretaries of the 1962-63 Inter-University Tournaments.

The Board accepted the decision of its appellate committee that the Hockey match between the Universities of Aligarh and Jahalpur, which was postponed earlier, be replayed at Madras. It has now been reported that the Aligarh team was given a walkover as the Jahalpur team could not reach Madras on the stipulated date, i.e. June 20. Consequently, the all-India finals were played between the Aligarh and Madras teams on June 22 in which Aligarh emerged as the winner.

On a reference from the Ministry of Education, the Board agreed to seek membership of some of the national sports federations in the country.

Sports

The Board amended the eligibility rules so as to allow seven years' eligibility period in the case of students getting admission to university courses after passing higher secondary or Senior Cambridge examinations, and six years' eligibility period in the case of students who have passed the Intermediate examination. For matriculates, the eligibility period will continue to be eight years.

Through another resolution, the Board decided to start Swimming and Basketball tournaments for women from the year 1963-64.

The proposal that special certificates of individual championship be awarded in Athletics and Gymnastics on the basis of highest points obtained by an individual, was approved.

The Board also assigned duties for conducting 1963-64 Inter-University Tournaments to various universities. The allocation chart is given below:

Committee for Sports Improvement

The Inter-University Sports Board, at its meeting held in Calcutta, set up a five-men committee for reviewing the entire situation concerning inter-university games and tournaments and to suggest suitable measures for their improvement. The committee consists of the following members:

Dr. Triguna Sen, Shri S. Govindarajulu, Shri K.A.P. Stevenson, Shri M. A. Chidambaram, and Dr. B.D. Laroia.

M.A. in Sports

Punjab University has decided to introduce a two-year Master's degree course in Sports from the next academic year, open to (a) graduate sportsmen who have represented at least in one major game of the university in inter-college meets, inter-university or inter-State meets; (b) holders of a post-graduate diploma in Physical Education (such candidates will be entitled to appear in Part I examination as a private candidate, but for Part II they will have to join the regular classes); and (c) those who have passed the B.P.E. examination of a recognised Indian university.

INTER-UNIVERSITY TOURNAMENTS, 1963-64 ALLOCATION CHART

Tournament	North Zone	South Zone	All-India Finals	Dates of Tournament
Athletics (Men & Women)	—	—	Kerala	December 29-31, 1963
Gymnastics, Weight-Lifting and Best Physique	—	—	Vikram	Third week of December 1963
Badminton (Men & Women)	—	Bombay	Bombay	First fortnight of October 1963
Basketball (Men)	Agra	Annamalaj	Lucknow	Last week of November 1963
Basketball (Women)	Lucknow	—	Lucknow	Last week of November 1963
Boxing	—	—	Bombay	Last week of September 1963
Football	Gauhati	Osmania	Gauhati	Last week of September & first week of October 1963
Hockey (Men)	Jammu & Kashmir	Nagpur	Jammu & Kashmir	First fortnight of January 1964
Hockey (Women)	—	—	Gujarat	First fortnight of January 1964
Kabaddi	—	—	Poona	Last week of November 1963
Kho-Kho (Men & Women)	—	—	Vikram	Second week of January 1964
Swimming (Men)	—	—	Calcutta	First week of October 1963
Swimming (Women)	—	—	Calcutta	First week of October 1963
Tennis (Men)	Allahabad	Sri Venkateswara	Allahabad	January 5-15, 1964
Tennis (Women)	—	—	Allahabad	January 5-15, 1964
Volleyball (Men)	Bihar	Andhra	Andhra	First fortnight of November 1963
Volleyball (Women)	—	—	Andhra	First fortnight of November 1963
Wrestling	—	—	Banaras	First fortnight of November 1963
Table-Tennis (Men)	Jadavpur	Madras	Jadavpur	First fortnight of October 1963
Table-Tennis (Women)	Jadavpur	Madras	Jadavpur	First fortnight of October 1963
Crickets: December 3, 1963—January 15, 1964	Delhi	Osmania	—	—
North Zone	Delhi	—	—	—
South Zone	—	Osmania	—	—
East Zone	—	Banaras	—	—
West Zone	—	Karnatak	—	—
Finals	Delhi	—	—	—

* If a majority of the entries received is from South Zone, then the venue will be shifted to Madras.

PERSONAL

SHRI K. M. PANIKKAR, Vice-Chancellor of Jammu & Kashmir University, is expected to take over the Vice-Chancellorship of Mysore University on July 1 for a period of three years.

SHRI K. P. MOHILEY has taken over charge of the office of the Registrar, Allahabad University, with effect from April 23, 1963.

MAHAMAHOPADHYAYA D. V. POTDAR, Vice-Chancellor, Poona University, has been nominated by the Union Ministry of Education as Chairman of the Central Sanskrit Board. He succeeds the late Shri M. Patanjali Sastri.

DR. V. RAGHAVAN, Professor of Sanskrit, Madras University, has been nominated by the Union Ministry of Education as Chairman of the Kendriya Sanskrit Vidyapeetha Tirupati Society, Tirupati. He will be succeeding the late Shri M. Patanjali Sastri.

DR. HOMI J. BHASHA, Chairman, Atomic Energy Commission of India, has been elected an Associate of the United States National Academy of Sciences. This is one of the highest honours that can be bestowed by the Academy to a non-American scientist.

SHRI P. N. KIRPAL, Secretary Ministry of Education, Government of India, has been appointed Director-General of the National Discipline Scheme in addition to his present assignment. His appointment will be temporary pending choice of a full-time successor to Major-General Bhonsle, who died in May.

DR. P. N. SRIVASTAVA, Reader in Zoology at Rajasthan University, has been selected by the International Atomic Energy Agency to work as a visiting scientist at the Atomic Energy Establishment of Japan. He will be staying in Japan for two months during the summer vacation, furthering his knowledge on Radiation Biology.

DR. G. C. PANDE, Tagore professor, who joined Rajasthan University in November last year, has taken over as the Head of the combined Department of History and Indian Culture.

DR. S. V. BHAGWAT, Deputy Registrar, Nagpur University, is appointed Officiating Registrar with effect from April 8, 1963 *vice* Dr. M. S. Modak having gone on leave.

SHRI T. V. RAGHAVAN, Assistant Registrar (Public Relations and Press), Delhi University, has joined the Indian School of International Studies as its Registrar.

ADVERTISEMENT RATES

Space	Per Insertion	For 4 Insertions
Full Page (16x24 cm.)	Rs. 300	Rs. 1,000
Half Page	Rs. 175	Rs. 600
Quarter Page	Rs. 100	Rs. 350
5.5x6 cm. space (17 lines)	Rs. 40	Rs. 140

For

QUALITY & RELIABILITY

Insist on Indian Make

Toshniwal

**LABORATORY
ELECTRONICS
ENGINEERING & INDUSTRIAL
INSTRUMENTS**

Contact :

TOSHNIWAL BROTHERS PRIVATE LTD.

198 Jamshedji Tata Road, Bombay-1

Branches :

Kacheri Road,
Ajmer.

85-A Sarat Bosa Road,
Calcutta-26.

3E/8 Jhandewalan Extn.,
New Delhi-1.

Round Tana, Mount
Road, Madras-2.

SEW INSTRUMENTS



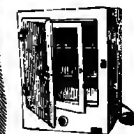
MICROSCOPES



ROCK CUTTING
MACHINES



SOIL & CEMENT
TEST EQUIPMENT



OVENS
& HEATING
APPLIANCES

UNITS SHAKERS



ELECTRO
PHORESIS

SCIENTIFIC EQUIPMENT WORKS

777, NICHOLSON ROAD,

DELHI - 6

STERLING SEW 38

FOR
CONTEMPORARY
ARTICLES OF OPINION
READ

The *American* *Review* A QUARTERLY

The AMERICAN REVIEW is an informative magazine containing authoritative articles by eminent educationists and authors on all aspects of American life and civilization. The subjects covered include art, literature and philosophy, economics, science, sociology, education and law.

Hand this order form
to your subscription
agents or mail directly
with remittance to :

M/s. Lalvani Bros.
Taj Building
210 Dr. D.N. Road
Fort
Bombay-1.

M/s. Patrika Syndicate (P) Ltd.
Gole Market, 12/1 Lindsay St.,
New Delhi : Calcutta-16

M/s. Swadesamitran Ltd.
Victory House
Mount Road
Madras.

ORDER FORM

Please send

THE AMERICAN REVIEW

1 YEAR (4) ISSUES ☐ Rs. 3

2 YEARS (8) ISSUES ☐ Rs. 5

NAME

ADDRESS & P.O.

CITY.....ZONE.....

DISTRICT.....STATE.....

I enclose payment of Rs..... by
cheque/postal order made payable to PATRIKA
SYNDICATE PRIVATE LTD., CALCUTTA

Date.....Signature.....

Low Priced Scientific and Technical Books reprinted in India with the Assistance of the Joint Indian-American Standard Works Programme.



ALLIED PACIFIC PRIVATE LTD.

Great Social Building, 40 Sir P. Mehta Road, Bombay-1.

	Our Price	Original Price
PRINCIPLES OF INDUSTRIAL ORGANIZATION by D.S. Kimball & D.S. Kimball, Jr.	Rs. 12.50	Rs. 36.25
PRINCIPLES OF PHYSICAL METALLURGY by Morton C. Smith	Rs. 10.00	Rs. 30.00
ALLOY SERIES IN PHYSICAL METALLURGY by Morton C. Smith	Rs. 10.00	Rs. 30.00
FARM ELECTRIFICATION by Robert H. Brown	Rs. 12.50	Rs. 38.75
THE PLANT KINGDOM by William H. Brown	Rs. 10.00	Rs. 39.50
*PRACTICE OF DERMATOLOGY by Dr. Pran Nath Behl	Rs. 35.00	
*THE INDIAN REPORTER'S GUIDE by Richard Critchfield	Rs. 15.00	

Catalog will be mailed upon request.

*These books are not subsidized under the PL 480 Program

HILGER SENSITIVE MICROFOCUS UNIT AND DIFFRACTOMETER

An x-ray source unit of great intensity and high resolution in conjunction with the extremely sensitive Hilger diffractometer is the ultimate combination for direct recording and photo - powder techniques, single crystal methods and micro-radiograph.

● MICROFOCUS UNIT

beams of 6 mm x 100 microns, and 1.4 mm x 100 microns, and 40 microns diameter spot, demountable X-ray tube maximum rating of 50kV, 10 mA

● RECORDING CONSOL

energy analysis
line profiles by strip recorder.
step - by - step line intensity plotting.

● DIFFRACTOMETER

accuracy to 0.01 of a degree in measurement of lattice parameters.
direct measurement of intensities
measurement of strains in crystalline planes.
interchangeable mounts for solids, powders, or spinning samples.
variable scanning speeds.
Integral monitoring system (diffractometer can be used with unbalanced X-ray generators).

For full details please Contact :

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LIMITED

India House,
Fort Street,
BOMBAY

B5 Gillanders House,
CALCUTTA

Sunlight Insurance Bldg.
26/27 Asaf Ali Road,
NEW DELHI

Humayun Kabir Highlights Role of Universities in Scientific Research

In his address at the conference of scientists and educationists held in New Delhi on August 4 and 5, Prof. Humayun Kabir, Union Minister for Scientific Research & Cultural Affairs, made a strong plea for more intensive support to be given to universities for scientific research.

The conference, which was held to review the implementation of the Government of India's Scientific Policy Resolution of 1958, was attended by some 50 eminent scientists and educationists.

Prof. Kabir said that out of the estimated Rs. 400 million to be spent on scientific research during

The conference later resolved that greater attention should be paid to the needs and requirements of universities and non-official agencies in order to achieve a proper and balanced development of science at present and to ensure an adequate supply of scientists in future.

Comparison With China

Prof. Kabir, while enumerating the "considerable" progress India had made during the past five years in the field of scientific and technical education and research, said that China's treacherous attack had made us realise that we must make still greater efforts to develop the scientific potential of the country on which alone its agricultural, industrial and defence strength could be built.

Prof. Kabir said that India was ahead of China in fundamental research. Inadequate attention to fundamental research might in the long run affect progress, but the emphasis on practical and applied research had certainly paid China short-term dividends.

China's concern with immediate problems is reflected in the relative emphasis on different aspects of training at the college and university level. In 1950, China had a total of 125,000 persons with university degrees, of which 21,000 were engineers. The figures for 1960 were 210,000 engineers out of 700,000 degree-holders. The comparative figures for India are about 30,000 graduate engineers out of a total of 3,50,000 graduates in 1950, and 100,000 engineers out of a total of 1,000,000 graduates in 1960.

the current year, the share of the universities and other non-official agencies was only Rs. 28 million (Rs. 18 million for universities), though it was well known that "best results are obtained when a major part of the research effort is sustained by universities and other non-official agencies".

While admitting that the National Research Councils made significant contributions to scientific advancement, Prof. Kabir pointed out that these agencies would tend to lose their initial impetus unless they were in close touch with universities. "There is general consensus opinion among scientists that research divorced from teaching always suffers," he added.

From Our Readers

I have just seen the June-July 1963 number of University News. May I congratulate you and your colleagues for the enormously interesting information which this number contains and which would otherwise not be available to people like me who, though not directly in touch with university affairs, are vitally interested in them.

—RAJA ROY SINGH,
Jt. Educational Adviser, Min. of Ed.

It is really an invaluable means of mutual information and of inter-university communication. I can only congratulate you on what you are achieving in this regard.

—HANS SIMONS
General Education Consultant,
UGC, and Ford Foundation.

Up-to-date news and brief comment on development and questions of higher education in India are covered on a fully nation-wide scale in this new periodical whose first issue, brought out in February 1963, manages to compress a remarkable amount of information into its 16 pages. Its value as a mirror of contemporary Indian university developments is enhanced by the fact that it is issued by a body of which most Indian Universities are members.

—Bulletin of the International
Association of Universities, Paris.

We have received three issues of your newly started journal University News and found them very interesting. We are sure this excellent publication will be very useful to students and faculty members visiting our library.

—S. M. MASTER
Indian Information Service, New York.

I am sure that a publication of this sort will fulfil a great need...

—W. W. BUECHNER
Head, Department of Physics,
M.I.T. (U.S.A.)

(Contd. on page 12 col. 1)

Education Secretaries Recommend Increased Allocations of Funds

The conference of Education Secretaries, held in New Delhi from June 27 to 29 to discuss the mid-Plan appraisal of the Third Plan, emphasised the need for increased allocations of Plan funds in all sectors of education in order to maintain the tempo of expansion and qualitative improvement.

Whereas in the Second Plan the increase in the outlay from the second year to the third year was 48%, there has been no appreciable increase of outlay in the third year of the current Plan. The Secretaries pointed out that as the third year of the Plan was always the peak of developmental activity, more funds should be made available for this year.

The resources allocated in the Third Plan for secondary education have been subjected to heavy strain as the result of the unprecedented expansion in primary enrolment. In most States the targets of secondary enrolment have already been reached during the first three years of the Plan and would thus be substantially exceeded by the end of the Plan.

In the university sector, the conferences noted, expanding activities called for more funds and more foreign exchange, particularly for the improvement of Science teaching.

'Cushion' Fund

In view of the growing demands in special sectors for added funds and the lack of resources within the Plan ceiling, the conference recommended the institution of a separate fund—a "cushion"—to support the extra demands necessitated by unavoidable diversion of funds.

The opinion was expressed that in several States the conversion of high to higher secondary schools had proved of doubtful utility. It was emphasized that the need for strengthening existing high schools was greater than converting them into higher secondary schools.

The Secretaries agreed that Science teaching in secondary schools must be improved and the "gap" between schools and universities in

regard to Science education must be bridged.

Earlier, in his inaugural speech, Shri P.N. Kirpal, Secretary, Union Ministry of Education, referred to certain "positive" features of the Indian educational scene and said there was a "substantial ground" for assurance in the achievements of the past 12 years of planning, especially in regard to enrolment at all stages of education.

U.P. Universities' V.Cs. Meet

The Vice-Chancellors of U.P. universities met in a conference at Naini Tal from June 19 to 21 under the chairmanship of the State Governor, Shri Biswanath Das, who is also the Chancellor of these universities. From amongst the various recommendations of the conference the following may be mentioned:

That steps be taken to strengthen the studies of ancient Indian sciences, arts and culture in the universities. The Vice-Chancellors expressed their concern at the lack of study in Indian universities of the fundamentals of ancient Indian sciences and arts as the background and foundation for the further study of these subjects in the light of modern knowledge and contemporary research.

That teachers should not be permitted to seek election to Parliament, State Legislatures or elected local bodies.

That the Chancellor may appoint a committee of Vice-Chancellors to draw up a scheme for the production of suitable original textbooks in Hindi.

I.U.B. MEETINGS

The Standing Committee of the Inter-University Board of India will meet in New Delhi on September 13.

* * * *

The 39th annual meeting of the Inter-University Board and its ninth quinquennial conference are scheduled to be held on December 28, 29 and 30 this year at Banaras Hindu University, Varanasi. The subjects for discussion at the seminar to be held on the occasion will be "University Administration" and "Three-Year Degree Course".

High power Committee to Co-ordinate Education & Employment

The Union Ministry of Education has set up a committee under the chairmanship of Prof. M.S. Thacker, Member (Education), Planning Commission, to examine the problem of education in relation to employment opportunities.

The committee will review the trends concerning the output at different levels of education *vis-a-vis* employment opportunities, and will recommend measures for bringing about better co-ordination between education and employment. The committee might also suggest the setting up of an organisational machinery for facilitating the employment of educated personnel.

Working Groups on Educational Planning

The Ministry of Education has set up a 28-member working group, with Shri P.N. Kirpal, Educational Adviser to the Government of India, as its chairman, to work out details of general education during the Fourth Five-Year Plan.

The group will make a critical review of the progress of the programmes and schemes in the Third Plan period and will formulate proposals for the Fourth Plan in the perspective, wherever possible, of a 15-year period, 1966-81.

The Ministry of Scientific Research & Cultural Affairs has also decided to set up a working group to prepare the broad outlines of a plan of expansion and development of technical education to be undertaken in the Fourth Plan period.

M.P.s' Committee on Higher Education

The Union Ministry of Education has appointed an eight-member committee of Members of Parliament, with Shri P.N. Sargu as chairman, to examine the provisions of the Constitution regarding the responsibility of the Central Government in the field of higher education with a view to finding out the extent to which the Centre could assume greater responsibility in this field.

The committee has been appointed on the recommendation of the Informal Consultative Committee of Members of Parliament on Education.



Queen Elizabeth the Queen Mother, Chancellor of London University, presents the hood of his honorary degree of Doctor of Laws to Dr A.L. Mudaliar, Vice-Chancellor, Madras University, at a ceremony in London.

DR. MUDALIAR HONOURED

Among the seven distinguished Commonwealth scholars who received honorary degrees of Doctor of Laws from Queen Elizabeth the Queen Mother, Chancellor of London University, on July 15, was Dr. A.L. Mudaliar, Vice-Chancellor of Madras University.

London University's public orator said of Dr. Mudaliar in the citation: "It is no common event for a man so to gain the respect and esteem of his contemporaries that they raise a statue to him in his lifetime. And when such recognition is accompanied by the establishment of a lectureship in his honour, he has doubly outdone most heroes."

"Sir Lakshmanaswami is now in the 21st year of his Vice-Chancellorship, and this at least can hardly be disputed: that to have been re-elected six times to such an office is an exception."

After tracing Dr. Mudaliar's career, the public orator added: "The success of his Vice-Chancellorship is implied in his regular re-election. The wider value of his judgement is attested by the number of higher bodies—for education, public health, technology, scientific research and university finance—on which he has been called to serve."

COMMONWEALTH UNIVERSITIES' CONGRESS

The British Prime Minister, Mr. Harold Macmillan, stressed the need for universities to be free from any form of government control when he spoke in London on July 17 at the congress dinner of the Association of Commonwealth Universities.

On the same occasion, Queen Elizabeth the Queen Mother, Chancellor of London University and president of the congress, presented to Sir Douglas (Principal of London University) as chairman of the Association of Commonwealth Universities the Royal Charter which it has been granted.

The ninth quinquennial congress of Commonwealth universities was held in London from July 15 to 19 and was attended by heads of 130 Commonwealth and 40 other universities. Among the delegates numbering almost 600 were Vice-Chancellors of nine Indian universities.

The opening plenary session was addressed by Sir Eric Ashby, Master of Clare College, Cambridge, who spoke on "Diversity of Universities in the Commonwealth".

Dr. Chatterji's Speech

Dr. A. C. Chatterji, Vice-Chancellor, Gorakhpur University, spoke on "The University Student—Selection and Admission" at the second plenary session on July 16 when the Duke of Edinburgh was also present. He suggested the establishment of non-residential universities where, instead of courses lasting a specified time, students would be able to take periodic tests when they felt themselves fit and qualified to do so. His suggestion aimed at reducing overcrowding and solving the problem of admission and selection.

The discussion session on the subject was presided over by Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University.

At the third plenary session on July 17, Prof. P. M. S. Blackett Nobel Prize winner for Physics in 1948 and Pro-Rector at the Imperial College of Science and Technology, London, pointed out that in the next five years expanding African

(Continued on page 17)



The Chancellor of Leicester University, Lord Adrian, congratulates Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University, after conferring upon him the honorary degree of Doctor of Laws.

LEICESTER CONFERS LL.D ON DR. DESHMUKH

Leicester University on July 13 conferred an honorary degree of Doctor of Laws on Dr. C. D. Deshmukh, who was in Britain for the Commonwealth Universities' Congress. During the ceremony Dr. Deshmukh was described as "a most distinguished representative of a great republican member of the Commonwealth".

PRINCETON HONOUR

Princeton University on June 18 conferred an honorary degree of Doctor of Laws on Dr. C. D. Deshmukh, Vice-Chancellor, Delhi University. Dr. Deshmukh visited the U.S.A. before attending the Commonwealth universities' conference in London. The citation read on the occasion said of Dr. Deshmukh:

"Calm, humane, and lofty-minded, he has given his life to the service of his country. After nearly four decades as monetary and financial expert, he has turned his quiet force and clarity of mind to the advancement of higher education in his ancient land, as Chairman of the University Grants Commission, as principal planner and guide of India's new centre for intercultural understanding, and as head of one of Asia's foremost universities. A botanist by training and a gardener by vocation, he believes, unlike Candide, in cultivating many gardens."

Indian Assistance Under Colombo Plan

Since the inception of the Colombo Plan for Co-operative Economic Development in South-East Asia in 1950, India has provided over 2,000 seats in various institutions for students from 17 countries, namely Burma, Ceylon, Indonesia, Laos, Malaya, Maldives Islands, Nepal, New Zealand, North Borneo, Pakistan, Philippines, Singapore, Sarawak, Thailand, Vietnam, Australia and Japan. In 1961-62 alone India provided 369 training places to the member countries of the Colombo Plan.

Among the countries of the region, India is the largest donor of technical aid, having made available assistance worth over Rs. 1.2 crores.

The training facilities which India has made available so far to these countries cover a wide field, including General Education, Civil, Mechanical and Electrical Engineering, Statistics, Forestry, Fisheries, Community Development and Co-operation, Agriculture, Medicine, and Economic Planning.

Egyptians Coming to India for Higher Study

Under an agreement reached between India and the U.A.R., a joint Indo-U.A.R. Board for Technical Co-operation is to be established shortly.

Under this agreement, which was signed during the recent visit to Cairo of Dr. H.S. Zahir, Chairman of CSIR, 20 Egyptian experts will be shortly taking up diploma courses at Indian institutes. In return, the U.A.R. Government is offering facilities for Indians to work on its jet plane project at Helwan, near Cairo.

Indian Students for Lumumba University

The Ministry of SR&CA has selected 38 candidates from India for admission to Patrice Lumumba Peoples' Friendship University, Moscow. Four of these will pursue post-graduate courses in Science

and Technology and 34 will take up diploma courses in Engineering.

Fulbright Agreement Renewed

A formal agreement to continue the Fulbright Programme of educational and cultural exchange between India and the United States was signed in New Delhi on June 19 by India's Foreign Secretary, Shri M.J. Desai, and the erstwhile U.S. Ambassador, Mr. J.K. Galbraith.

The revised agreement supersedes the agreement of 1950 and opens the door for a wider variety of educational activities on the part of the Foundation.

The activities of the Foundation are financed by PL-480 Funds. Five members of its Board of Directors are appointed by the Government of India and five by the American Ambassador.

During the 12 years of its existence, the Foundation has been instrumental in facilitating academic work in the United States for about 1,500 Indians and for arranging grants for more than 500 Americans to come to India for research and lecturing.

U.S. Team Visits India

A group of 41 Americans, including 29 professors, 18 students and 3 student leaders, headed by Dr. W.J. Kitchin, Executive Director of World University Service, is in India for a two-month seminar-cum-travel project.

World University Service, with headquarters in New York, is an international university organization. In more than 50 countries throughout the world its services are devoted to the betterment of the university community through mutual assistance. At present WUS in India is headed by Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University.

The theme of the seminar, which was held in two sessions at Delhi and Bangalore respectively, was "India and the United States: the Unbroken Dialogue". Besides academic discussions at the semi-

nar, the visitors and their Indian counterparts are participating in work projects. Under one of the projects a group of American and Indian students completed the construction of a gymnasium at the W.A.F. Memorial Shivaji College in Delhi. Another group will work at Jadavpur University on a cafeteria project, and the third one will participate in a village improvement programme at Belatur village, near Mysore.

Another group of 14 students and two adult leaders from the University of California, have been on a two-month tour of India since July 3 under "Project India".

British Graduates to Teach in India

Sixteen young university graduates from Britain are currently arriving in India to teach mainly English and Science in schools and universities all over the country. They have been sponsored by Voluntary Service Overseas, a British organisation which recruits young people in every walk of life for voluntary work in developing countries.

While in India, volunteers receive local rates of pay and live at the university or other institution to which they have been assigned. Graduates accept an initial engagement of one year, but this can be extended by mutual agreement.

Commonwealth Service Awards Scheme

A new awards scheme to enable outstanding men and women from British universities to serve for a time in selected posts in other Commonwealth universities was announced in London on July 16. The first awards will be made next year.

Each award will be £1,500 a year and will be additional to the total emoluments ordinarily paid to British university staff in the countries concerned.

Overseas universities are being consulted about the posts they would like to be filled in this way.

Seminars

Universities' Role in Promoting World Understanding

At the instance of Unesco, a national seminar to discuss universities' role in promoting East-West understanding was held from Aug. 31 to Sept. 3 at the India International Centre, New Delhi. It was inaugurated by Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University, and presided over by Shri P. N. Kirpal, Education Secretary. Representatives from 32 universities participated.

Emphasizing the importance of linguistic studies as the basic tool for research in other cultures, the seminar outlined broad subjects for cultural research and recommended that each university might start a centre to study one particular centre.

As part of the Unesco project, which aims at promoting mutual appreciation of Eastern and Western cultural values, a series of symposia on "Traditional Values in American and Indian Life" is also being organised. A paper on traditional values in American life was prepared by Dr. Ralph H. Gabriel and a paper on traditional values in Indian life by Dr. S.R. Chatoopadhyaya, of Visva Bharati.

These papers were discussed at the first symposium in the series held at the India International Centre on January 14-15 this year, in which eight universities from the northern region took part. Four other similar symposia will be organised in September this year on regional basis by the universities of Jadavpur, Poona, Osmania and Banaras.

Orient-Ocident Week

The India International Centre is also arranging an "Orient-Occident Week" at 10 university centres during September-October this year. The countries to be featured are: Argentina, Burma, Ceylon, Greece, Indonesia, Italy, Japan, Mexico, Nepal and Poland. The universities will arrange talks by experts and exhibitions with the aid of the embassies of the countries concerned.



Dr. William B. Hasseltine, Research Professor at Wisconsin University (U.S.A.), addressing the workshop for the teachers of American History and American Literature held at Mussorie in June last.

Refresher Courses in Engineering

The Refresher Courses Department of Roorkee University is running four three-month refresher courses during the academic session 1963-64: (i) Civil Engineering (Buildings and Roads), from 22.10.1963 to 21.1.1964; (ii) Mechanical Engineering, from 15.11.1963 to 14.2.1964; (iii) Civil Engineering (Irrigation), from 1.5.1964 to 31.7.1964; and (iv) Electrical Engineering, from 1.5.1964 to 31.7.1964.

In addition to these courses, 11 specialist courses are scheduled to run during the year on popular subjects like Foundation Engineering, System Protection, Foundry Engineering, Creative Machine Design, Air Conditioning and Refrigeration etc.

Two summer institute courses on Engineering Design (Mechanical) and Earthquake Engineering, meant for teachers of technical colleges, were also arranged this year. It is proposed to run similar courses for teachers of technical colleges next summer.

American Cultural Week

An "American Cultural Week" was celebrated in Hyderabad from August 19 to 26 under the joint auspices of Osmania University and the U.S. Information Service, Madras. The programme featured seminars, films, lectures, panel discussions, and an exhibition on America's scientific quest.

Seminar on Journalism

The Department of Journalism of Osmania University, in collaboration with USIS, Madras, arranged a seminar on Journalism on August 22 and 23. Shri S.A. Govindarajun, Head of the Journalism Department, presided.

Lectures on General Education

Sardar Vallabhbhai Vidyapeeth has arranged a series of lectures on General Education. The first talk was given by Shri Yashwanth Shukla, Principal of the I.K. Arts College, Ahmedabad, on July 13.

Study Circle in Sanskrit

The Department of Adult Education which the University of Rajasthan is the first Indian university to establish, will carry the first phase of its programme a step further in August by organising a study circle in Sanskrit covering a period of eight months. A study circle in the Bengali language is also envisaged this year.

Elocution Contest

The Union Ministry of Education has decided to hold the second all-India elocution contest for students in traditional types of Sanskrit institutions, in November 1963. The contest is being held under the Ministry's scheme to encourage and popularise the study and learning of Sanskrit.

COURSES OF STUDY

Banaras University has replaced the 21-year-old diploma course in *Library Science* with a graduate course from the current session. Steps are being taken to institute Master's degree in *Library Science* as well.

The university has introduced M.A. in *Sociology* from the session 1963-64.

Gauhati University has decided to start a post-graduate *Department of Zoology*.

Karnatak University has introduced a post-graduate course in *Applied Geology* from this year.

Kerala University has set up a new post-graduate *Department of Law* at Ernakulam. The department will not give any training for the first degree course but will register students only for the degrees of Doctor of Laws and LL.M.

A three-year course in *Engineering for Science graduates* is being introduced.

Kurukshetra University has started a *Department of Linguistics* this year under the Institute of Indian Studies to carry on research with special emphasis on the language and dialect of the Haryana region.

New post-graduate courses in *M.Sc. Physics* and *M.Ed* and under-graduate courses in *Geography, Botany* and *Geology* have commenced from this year.

M.S. Baroda: The university has started providing instruction in the five-year integrated course leading to the degree of Bachelor of *Chemical Engineering* from June 1963, with an intake of 30 students.

The following post-graduate courses leading to the degree of M.E. have been approved: *Civil—Highways and Bridge Engineering, Advanced Irrigation and Hydraulics, Public Health Engineering, and Soil Mechanics and Foundation Engineering; Mechanical—Internal Combustion Engineering; Electrical—Servo-Mechanisms, Automatic Control Devices.*

The university has started a one-year post-graduate diploma course in *Taxation Law* from the current academic year.

Campus News

Osmania University: The college of Education has started Ph. D. in *Education* this year. Eight candidates have been registered for this course.

Punjab University: With the establishment of the four new Departments of *Education, Biochemistry, Physical Education* and *Russian*, the number of teaching departments at the university has gone up to 33.

Two centres for advanced training and research, one in *Mathematics* and another in *Geology (Paleontology and Himalayan Geology)*, have been started at the university.

Seven new courses have been introduced, which include: *M.Sc. in Chemical Engineering and Technology*; post-M.A. diploma in *Counselling and Guidance*; *M.Com.*; diploma/certificate courses in *Cartography, Sanskrit, Chinese Language and History, and American History.*

In view of the importance of *Mathematics in Pharmacy*, the university has included the teaching of this subject in the Pharmacy course from this year.

Rabindra Bharati has introduced a three-year degree course in *Fine Arts* with effect from the current academic year. Hitherto, the Faculty of Fine Arts held only diploma examinations in *Dance, Drama* and *Music*.

Rajasthan University has set up an advanced research unit on *Inorganic Polymers* in the Department of Chemistry.

Statistics has been introduced by the university in combination with other subjects, both for Arts and Science students from first year T.D.C. to M.A. and M.Sc.

Sri Venkateswara University has made provision for the teaching of *Philosophy* in the B.A. general degree course at the University College of Arts and Sciences.

Utkal University has introduced M.D. courses in *Paediatrics, Biochemistry, Venereology* and *Dermatology*.

Chemical and Metallurgical Engineering have been included in the five-year integrated course in Engineering.

COLLEGES

Karnatak University: Four new colleges have started functioning in the university area from this year, of which one is purely an Arts College, one an Engineering College, and the other two provide courses both in Arts and Sciences. This raises the number of colleges in the university area to 43. The enrolment of students in the affiliated and constituent colleges has risen from 15,934 to 19,284.

Rajasthan University has granted affiliation to the evening colleges started at Jaipur by the Pradesh Bharat Sewak Samaj for P.U.C. and T.D.C. in Arts subjects from July this year.

Vikram: The number of colleges affiliated to the university has increased from 58 in 1962-63 to 71 in 1963-64. Out of the 71 colleges, 24 are constituent colleges providing post-graduate studies and the remaining 47 are affiliated colleges providing studies up to degree standard.

Utkal University has granted affiliation to 10 new colleges. Two evening colleges have been started, one at Sambalpur and the other at Bhubaneswar.

EXAMINATION REFORM

Gauhati University: A special committee to deal with the examination procedure has been appointed. A small research unit has also been set up to investigate problems connected with examination reforms. Major changes have already been introduced in the matriculation examination.

Sri Venkateswara University: The examination system for the three-year degree course has been revised with effect from the current academic year. Under the new scheme students should take university examination at the end of each year. Previously students were taking a university examination at the end of the second year of the three-year degree course in English, a second language and General Education, and another university examination in the optional subjects at the end of the third year of the course.

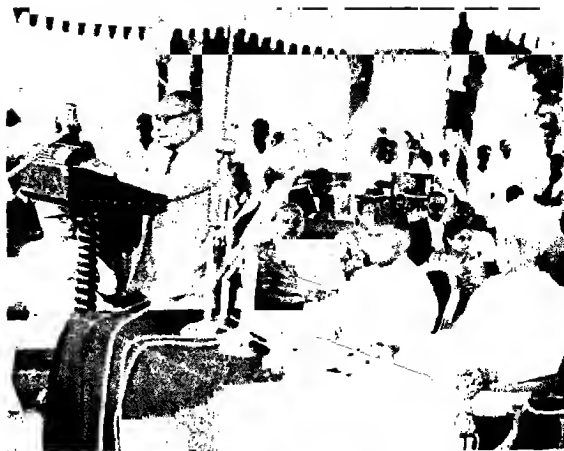
President Opens Osmania University Library

The new building of the Osmania University Library was declared open by the President, Dr. S. Radhakrishnan, on August 3.

Built at a cost of Rs. 13 lakhs, the library consists of nearly 1.25 lakh volumes and over 6,000 manuscripts, including ancient and rare palm-leaf manuscripts. It receives more than 500 periodicals and journals.

In his speech, the President advised the students to devote part of their time to the study of classics which, he said, had an everlasting value.

The foundation stone of the building was laid on October 14, 1956 by Dr. Radhakrishna Rao, then Chancellor of the university, and the implementation of the project started in 1957 when Dr. D.S. Reddi assumed charge as Vice-Chancellor of the university.



The President, Dr. Radhakrishnan, at Osmania University, where he opened the new library building on August 3. Welcoming the President is Dr. D.S. Reddi, Vice-Chancellor of the university. On the President's right is Gen. S.M. Srinagesh, Chancellor of the university.

Prime Minister Inaugurates Agricultural University at Ludhiana

The Prime Minister, Shri Jawaharlal Nehru, while formally inaugurating Punjab Agricultural University at Ludhiana on July 8, said that its primary responsibility was to create a revolution in the minds of cultivators, as they were the persons to implement what was taught at the institution.

He asked the staff and senior students of the university to establish closer contacts with peasants and impress upon them the need for employing modern methods of cultivation. The university could realise its objectives only if it created an impression in the minds of the tillers that it belonged to them, the Prime Minister said. He wanted similar universities to be established in all other States.

At present agricultural universities are situated in Punjab, Rajasthan and U. P. All the three universities are patterned after the American land grant system.

Punjab Agricultural University is located on a 1500-acre tract on the outskirts of Ludhiana. It has at present three constituent colleges: the College of Agriculture, Ludhiana; the College of Agriculture

Hissar; and the College of Veterinary Science and Animal Husbandry, Hissar. In addition, Colleges in Agricultural Engineering, Home Science, Basic Sciences and Humanities are being set up. The State Agriculture Department has transferred all its research work to the university, and all the State Research Stations are being shifted to Ludhiana.

The university will offer an integrated programme in agricultural education, research and extension work, incorporating the latest ideas in educational policy and techniques. Some of the distinctive features of the university will be the student advisory service, an expanded course and credit system and frequent internal examinations.

The university is functioning in close co-operation with the Ohio State University of America and has invited some of its professors to work in an advisory capacity. About 24 staff members of the university have received advanced training at the Ohio State University and five more will go there before the year is out. Ohio has also contributed equipment and commodities to the university.

● An interest-free loan of Rs. 34,000 has been sanctioned to the Rajasthan University Committee of World University Service for the construction of a hostel to provide suitable and inexpensive accommodation to 25 students. The university will contribute up to Rs. 6,000 towards the cost of construction.

A sum of Rs. 22,000 has also been allotted to the Rajasthan University Committee for building a students' ward in the S. M. D. Hospital, Jaipur.

● To cope with the growing admissions of women students, Kurukshetra University has started construction of a new hostel for women students. Already three more wings have been added to the existing women's hostel. The university has also built a bachelors' hostel for staff members.

● A new girls' hostel providing residential accommodation for 211 girl students has been completed on the Punjab University campus.

● Vikram University's schools of studies in Zoology and Botany, which were functioning at Gwalior, have now been shifted to the university headquarters at Ujjain.

Indian School of International Studies

Established in 1955 with the object of promoting basic research in international affairs and providing necessary facilities and training in area studies leading to a Ph.D. degree, the Indian School of International Studies has now three full-fledged departments: International Politics and Organisation, International Economics, and International Law.

At present facilities are available for research in the history and institutions of Asia, America and the Commonwealth; they will shortly be extended to cover the Soviet Union as well.

The Ph. D. course is of a minimum period of three years, the first year being devoted to a general study of international affairs, research methodology and an intensive study of a selected region. The rest of the period is devoted to research on a chosen subject relating to the selected region.

Facility for Field Study

If the research on the chosen topic necessitates the candidate's visit to the region concerned, the School provides assistance and facilities for such a field study. Training in several Asian and European languages is also available at the School for the benefit of research scholars.

Research papers and studies prepared by the staff and students of the School are usually published in the School's quarterly, *International Studies*. They are also published in the form of monographs. So far seven such monographs have been published. Among those under preparation are: "China's Foreign Policy 1955-61", "Recent American Foreign Relations", and "Non-violence in International Relations".

Research activities at the School are made possible by grants from UGC, the Rockefeller Foundation, Ford Foundation and the Reserve Bank of India. Besides, the State Governments of West Bengal, Bihar, Maharashtra, Madras, Rajasthan and Punjab provide scholarships for students.

At present the School has nearly 75 students working for their Ph. D. degree. Since the establishment of the School, 17 students have submitted their dissertations and have qualified for the degree. In addition to admitting regular research scholars, it has been the practice of the School to give guidance and source material to students of other educational institutions in the capacity of casual students.

American Studies Centre in India

Plans are going ahead for the establishment of the American Studies Research Centre in India with the primary object of promoting American studies in Indian universities and colleges. Already 22 Indian universities are providing facilities for offering papers in American Literature and some 19 in American History.

The Centre, the executive office of which is temporarily housed in the U.S. Educational Foundation office in New Delhi, is likely to be located at the Osmania University campus, Hyderabad. It will consist initially of a library in American Literature and American History with limited representation of other American subjects for the use of Indian teachers and research scholars. Later, seminars and conferences will be arranged and research fellows attached to the Centre. To start with, the Asia Foundation has collected a large supply of books in San Francisco (U.S.A.) which is awaiting shipment to India.

The workshop on American History and Literature organised by the Centre in collaboration with the U.S. Educational Foundation in Mussoorie in June this year was its first academic project (*University News* Vol. I No. 3).

Board of Directors

The Board of Directors of the Centre consists of 12 members, including a representative each of the Inter-University Board of India, the Ministry of Education, UGC, the U.S. Educational Foundation in India, the U.S. Embassy, and the American Institute for Indian

Studies, Poona. The remaining six members are persons associated with the teaching of the various branches of American studies.

At the first meeting of the Board of Directors, held at Mussoorie in June, Dr. Olive I. Reddick, Director, USEFI, was elected chairman and Dr. B.D. Laroia treasurer. Dr. P.J. Phillip, Joint Secretary, UGC, is a member of the Executive Committee.

So far the Centre has received small grants from USIS under the PL-480 Programme. At its meeting the Board discussed ways and means of securing funds, both for the library and for administrative expenses, and considered the appointment of a Director and a librarian.

The Centre is a registered body under the Indian Societies Act. Apart from individual members, there is provision for corporate bodies like universities and other educational institutions to become its members.

20 U.S. Scholars Take Up Indian Studies

Twenty-one young American scholars have received fellowships from the Social Science Research Council and the American Council of Learned Societies for studies relating to India. The recipients, most of them working for their doctorates in Indian subjects, will carry out their studies in India, the United States or England or in more than one of these countries.

Indian Studies Department at Melbourne University

The University of Melbourne (Australia) has expanded its Department of Indian Studies and has appointed Prof. Sibrarayan Ray, former Head of the Department of English at the S.I.E.S. College, Sion, Bombay, as its new Head.

The enrolment at the Department rose from 9 in 1961 to 33 in 1962. This year, 61 students have enrolled for the course in Indian Studies.

The Department of Indian Studies hopes to introduce, by 1965, an Honours course with special training in Sanskrit and one modern Indian language.

*PUBLISHING TRENDS IN INDIA

Meagre Output of Books on Science and Technology

According to a survey made of current publications received in the National Library, Calcutta, which is one of the three public libraries entitled to receive one copy each of all publications under the provisions of the Delivery of Books (Public Libraries) Act, 1954, India fares poorly in the production of books as compared with other advanced countries.

For a population of more than 430 million, India produced 21,076 books in 1961-62, giving 48 titles per million of population (or one book for 20,500 people) as against 188 per million in the U.S.S.R., 375 in the U.K., 673 in the Netherlands, 649 in Switzerland, 199 in Japan, 522 in Belgium, 455 in Czechoslovakia, 242 in France and 290 in Germany.

Stress on Literature

Apart from the quantitative assessment, it is important to note the contents of the publications in order to evaluate their contribution in building up the nation. A subject analysis of the 1961-62 publications reveals that 40% of these relate to Literature, only 4½% to Science, and less than 1% to Technology. Compared to these figures, the U.S.S.R. produces 48% of the total annual publications on Technology, only 12% on Literature, and 7% on Science. The percentage of technological books for the U.K., the U.S.A., Japan, Germany and Czechoslovakia is 16, 12, 12.5, 12 and 26 respectively.

Delhi, Maharashtra and West Bengal are on top of the production list. Delhi occupies the first position (with 3,828 titles) because most of the Government of India publications are published there.

During the last 71 years (1890-1961) literacy in India has increased four times (from 6% to 23.7%), whereas the increase in the number of publications has been 22 times (from 9,378 in 1889-90 to 21,076 in 1961-62). Our increased demand for books has been met by importing more foreign publications each year.

* Drawn from the article "Current Publishing Trends in India" by C.R. Benerji, published in Indian Literature, Sahitya Akademi, Vol. V No. 2.

The cost of the imported publications went up from Rs. 4,842,495 in 1946 to Rs. 23,428,429 in 1961.

A linguistic analysis of the Indian publications shows that English predominates (with 91,351 titles), Hindi coming a poor second (2,805), closely followed by Bengali and Marathi with 3,043 and 2,038 titles respectively. It is surprising to note that in spite of so much of talk about regional languages, Indian language publication has made no progress since 1930—the number of publications has actually come down from 14,000 in 1930-31 to 11,751 in 1960-61.

No Originality

Two dominant features of the current Indian language publications are the emphasis on the works of fiction and a large output of textbooks for the secondary and degree courses. But many of them have no originality of their own, their aim being to assist the students in passing the examination and not to impart knowledge. Our students who have opted for Indian language medium have little opportunity to come in contact with the master minds through their books. Eminent Indian scholars usually prefer to write their authoritative books in English.

Scheme to Assist Indian Authors of Textbooks

A scheme for giving assistance for publication of university textbooks written by Indian authors who have already established themselves and whose books can be regarded as "standard", has been formulated by the Ministry of Education. The aim of the scheme is to make available to students reasonably priced textbooks and, at the same time, to encourage Indian authors whose works have already acquired a permanent standing in Indian universities and colleges.

A minimum assistance of Rs. 5,000 will be available for any particular book. The total provision of Rs. 4 lakhs for the Third Plan period will be equally divided between Science and Technology on the one hand and the Humanities on the other. Since the scheme is national in scope only publications in English will, at present, be eligible for assistance.

Low-priced Textbooks

Thirty-nine American textbooks have so far been reprinted in India for Indian university students under the Joint Indo-American Standard Works Programme. The Indian reprint editions are unabridged reproductions of American textbooks and are priced at 1/3rd or less of the cost of the original editions. Reprint editions of 58 additional titles on a wide range of subjects are under preparation.

The selection of titles is made by a joint Indo-American Board, presided over by Shri P.N. Kirpal, Education Secretary to the Government of India.

At present only English reprints are done under the project. There are, however, plans for publication of volumes in Hindi in the near future. Translations in other major Indian languages are also contemplated.

British Publications

The English Language Book Society and leading British publishers have also introduced a series of low-priced textbooks, in which nearly 70 works are available, at present mainly in the scientific and technical range. These have been reprinted from the original text in every case and the titles carry blue, orange, green or dark-red labels according to the prices, i.e. 9s, 12s, 15s and 21s respectively.

Recently ELBS submitted a further list of titles to the Union Ministry of Education for possible inclusion in their low-priced textbooks series. This list is being circulated by the Ministry to universities for comments and recommendations.

Russian Books

There has also been an offer from the U.S.S.R. for making English translations of Russian textbooks in Science and Technology available for distribution in India. About 26 Soviet textbooks in these subjects have been translated into English.

(Folders announcing the publication of reprints of about 100 American and British textbooks have been received, copies of which can be obtained from the Editor, University News, by all those who are interested to have a complete list of titles published so far under the low-priced textbook schemes.)

Number of Students Registered for various

(A statement showing the number of students who appeared in the June Examinations)

Name of University/Institution	P.U.C. Arts & Com.	P.U.C. Science	B.A.	B.Sc.	B. Com.	M.A.	M. Sc.	M. Com.	B. Ed.	M. Ed.
1. Aligarh	—	—	1,839 ⁵	596 ²²² 152	232	676	200	85	—	—
2. Annamalai	245	211	112	160	85	53	117	14	104	—
3. Bihar	10,923	4,927	5,107 ^{1,323}	1,172 ³⁵⁰	410 ⁸⁸	891	154	—	—	—
4. Bhandari	4,467 ⁴⁸⁸	2,957 ²⁷⁵	3,050	1,390	638	—	—	—	125	—
5. Banhar	10,110	3,235	7,066	763	495	N.A.	N.A.	N.A.	—	—
6. Gujarat	11,798 ^{7,774}	7,217 ^{5,191}	4,498 ⁶²	1,614 ^{1,354}	1,528	648	286	143	497	—
7. Jabalpur	125 ²⁹	34 ¹⁰	791	383 ⁹³	420	342	100	107	187	—
8. Kalyani	—	—	57	37	—	2	30	—	—	—
9. Lucknow	—	—	4,901 ¹¹⁷	2,333 ¹²⁷	781	1,356	430	208	—	—
10. Madras	26,346 ¹⁵	—	6,096	10,344 ⁴⁵⁴	1,842	889	947 ⁶³	76	1,758	—
11. Marathwada	1,797	1,483	502	276	178	89	31	—	143	—
12. Mysore	22,876 ¹⁵	—	2,117 ¹⁷	4,702 ¹⁵⁷	1,198	316	251	14	547	—
13. Nagpur	10,843	2,355	2,119	396 ⁴⁰	880	676	149	109	441	—
14. Orissa Agri.	—	—	—	—	—	—	—	—	—	—
15. Panjab	21,511 ¹⁵	—	4,126 ²	2,286	87	2,103	19	—	2,034	N
16. Panjab Agri.	—	—	—	—	—	—	—	—	—	—
17. Utkal	2,782	2,779	1,074 ³⁷⁹	530 ¹²⁵	214	—	—	—	351	—
18. Vija-Bharati	5	—	487	37	—	N.A.	—	—	74	—
19. Indian Institute of Science,	—	—	—	—	—	—	—	—	—	—
20. Gurukul Kangri	125	54 ⁵	11	19	—	11	—	—	—	—
21. Indira Kala Sangrahalaya	282	—	174 ¹⁹ 21 ²¹	—	—	91 ¹⁵	—	—	—	—
Grand Total for 47 Universities :	228,010	56,168	129,667	68,192	31,293	24,407	7,104	2,261	14,338	649 ¹

1 : Home Arts, 2 : Home Science, 3 : Home Economics, 4 : Agri. Engg., 5 : Including 8 Supplementary Candidates, 6 : B. E. (Chem), 7 : Hons., 8 : Includes Arts, Science & Commerce Candidates. * Figures for B.A. (Pass) Not Available.

Examinations (1963, Final)—II

registered at 26 Indian universities
 of *University News*.)

L. B.	L.L. M.	B. Sc. (Ag.)	M. Sc. (Ag.)	M.B.B.S.	M.D., M.S.	B.V. Sc. & A.H.	M.V. Sc. & A.H.	B.E./B.Sc. (Engg.)	M.E./M.Sc. (Engg.)	B. Tech.	M. Tech. M.Sc. Tech.
320 ⁶	1	65 24 ¹	16	—	—	—	—	—	—	—	11
—	—	35	5	—	—	—	—	115 46 ⁷	N.A.	—	—
288	—	82	—	102	—	—	—	73	—	—	—
—	—	—	—	—	—	—	—	—	—	30	—
44	—	74	—	92	—	199	—	100	—	—	—
486	39	59	—	133	34	—	—	400	3	—	—
110	N.A.	80	33	46	N.A.	27	N.A.	277 ⁷	N.A.	—	—
—	—	49	4	—	—	—	—	—	—	—	—
1,576	68	—	—	—	—	—	—	—	—	—	—
763	48	164 ^{1*}	35	587	174	18	—	1,042 ¹⁷	81	123	—
50	—	33	—	25	—	—	—	23	—	—	—
370	19	227	—	—	—	256	—	5354 ¹⁸	11	—	—
134	3	200	45	105	8	34	—	88	—	20	—
—	—	117	—	—	—	40	—	—	—	—	—
399	3	76	—	172	37	—	—	—	—	30	—
—	—	113	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	114	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	83	144	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
10,275	354	4,831	564	4,491	923	1,190	81	14,869	50 ⁷	1,042	239

..A., ..S.; I. Sc., ..S.; Special, ..S.; Subsidiary, ..S.; J. Com., ..S.; B. Mus., ..S.; Mus (Hons.), ..S.; M. Mus., ..S.; Uncertain, ..S.; Old Regulations,

SCIENTISTS' CONFERENCE

(Contd. from page 1)

In China engineers are double the number of Science graduates, whereas in India the number of Science graduates has remained roughly double the number of trained engineers during the past decade.

In respects of senior scientists India takes the lead. In 1957, the Chinese Academy of Sciences had only 746 senior scientists out of a total of 17,000 employees. In India, CSIR alone has today about 2,000 scientists with university qualifications out of a total of 11,000 employees.

Prof. Kabir observed that while India started with a distinct advantage and was still ahead of China, there was a "definite risk" that we might lose this lead unless there was a sharp upward revision in allocation for scientific research in the country.

The conference recommended that the total allocation of resources for scientific research must be increased to at least 1% of the total national income from the present allocation of .3%. In terms of manpower, the existing number of 15,000 persons engaged in scientific research should be doubled within the next five years.

Advisory Board

The experts were conscious of the fact that the increase in the allocation would not meet the needs. They, therefore, stressed that measures must be taken to ensure that these resources were utilised in the most economic manner. Towards this end, they suggested the setting up of a representative advisory body which should survey the entire field, determine priorities and programmes, and advise the Government on allocation of funds and proportion to different bodies.

The conference also recommended that adequate provision should be made of foreign exchange for importing scientific equipment and material needed for purposes of research.

Another recommendation of the conference was that conditions of recruitment should be liberalised so

as to give adequate recognition to actual achievement as established through published papers, in addition to the academic qualifications which, at present, form the only basis of recruitment.

The conference also requested the Government to simplify the structure of scientific services to ensure greater mobility and internal democracy in order to achieve optimum conditions for creative work.

Indian Science Congress

The 50th session of the Indian Science Congress, which was to have been held early this year but was postponed due to the national emergency, will now be held from October 7 to 10 in New Delhi. Dr. D.S. Kothari, Chairman of UGC, will preside.

Acceleration of Engineering Courses

In order to increase the out-turn of engineers during the national emergency, several Indian universities, acting on the advice of the Inter-University Board, have taken steps to shorten and accelerate the Engineering degree course by adopting different methods, e.g. cutting holidays, advancing dates of admissions and examinations, increasing the number of supplementary examinations, and allowing failed students to continue in the next higher class upto a certain limit within the full term of the course.

According to the information received so far, the following universities have amended their regulations to this effect: Andhra, Annamalai, Banaras, Bombay, Jadavpur, Kerala, Punjab, Rajasthan and Sri Venkateswara Universities.

Tutorial Colleges in Engineering

Tutorial colleges in Civil, Mechanical and Electrical Engineering courses are being started at Gauhati and Chandigarh this year under a scheme launched two years ago by the Ministry of Defence in co-operation with the Ministry of SR & CA.

The Defence Technical Training Association, which will run these colleges, is already running 28

tutorial colleges in 21 towns all over India, training 3,300 part-time students for the graduateship of the Institution of Engineering, the Institution of Telecommunication Engineering and the Aeronautical Society of India.

It is also proposed to start an Aeronautical Engineering course at Cochin and another course for the graduateship examination of the Institution of Electrical and Radio Engineering. It is expected that by the end of the Third Five-Year Plan 5,000 engineers would have been trained by these tutorial colleges.

New Experiment in 'Guest Students'

It is expected that a Regional Engineering College will start functioning at Kurukshetra next year. The Government has already acquired 300 acres of land for the proposed college. This year, however, 120 students have been admitted on behalf of Kurukshetra University to the Engineering colleges at Patiala and Chandigarh as "guest students". They will be transferred to Kurukshetra as soon as the new college starts functioning there.

C.S.I.R. Research Schemes for Universities

The Council of Scientific and Industrial Research has recently sanctioned 79 research schemes to various universities and colleges for 1963-64. Of these, 50 schemes have been allotted to universities—Lucknow (11); Allahabad (10); Andhra (5); Jadavpur (4); Calcutta and Punjab (3 each); Aligarh, Banaras, Delhi and Jodhpur (2 each); and Gorakhpur, Jabalpur, Kalyani, Roorkee, Rajasthan and M.S. Baroda Universities (1 each).

I. C. A. R. Research Schemes

The Indian Council of Agricultural Research has sponsored a programme of research relating to agricultural products at six university centres, namely Aligarh, Calcutta, Delhi, Punjab Agricultural, and Saugar Universities. The Council will lend specialists to assist these universities and will meet 50% of the cost of the projects.

Ford Foundation Grants

The Ford Foundation on July 5 announced grants amounting to \$745,000 for population studies at the Universities of Delhi, Kerala, Mysore and Rajasthan, and the laboratories of the Indian Institutes of Science and Agriculture.

India also received \$ 5 million for intensive family planning and health programmes, thus partaking the major share of the \$7.5 million Ford Foundation grant for population studies and health programmes in four countries.

In addition to these grants, Baroda University received \$567,000 for research and training in Home Science; U.P. Agricultural University \$270,000 for farm-management research and training; the Indian National Institute for Industrial Design \$350,000; and the Planning Commission a grant of \$85,000 for instituting research fellowships.

U.S. Grants for Medical Research

The U.S. Government has recently sanctioned four grants totalling Rs. 1,558,090 for medical research in India, under the PL-480 Programme.

The Indian Council of Medical Research, New Delhi, will receive Rs. 6 lakhs; the National Association for the Blind, Bombay, Rs. 5 lakhs; the Madras Medical College a little over Rs. 4 lakhs; and Saugor University Rs. 56,800.

Commonwealth University Interchange Grants

Thirty-three Indian university scholars availed themselves of travel grants under the Scheme for Commonwealth University Interchange during the year 1962-63,

Grants & Awards

CSIR Grants for Fellowships in 1962-63

A total grant of about Rs. 16.47 lakhs was made by CSIR for fellowships in educational and research institutions during 1962-63. Twenty colleges and research departments of 25 universities, besides 28 other organisations, were recipients of the grants.

Andhra University received the highest amount (Rs. 2.10 lakhs), followed by the Indian Institute of Science, Bangalore (Rs. 1.85 lakhs), Delhi University (Rs. 1.21 lakhs), and the Indian Agricultural Research Institute, New Delhi (Rs. 1.14 lakhs).

Research Fellowships in Museology

On the recommendation of the Central Advisory Board of Museums, the Ministry of SR&CA has instituted a scheme for the award of three research fellowships, each of the value of Rs. 250 p.m., every year in Museology and Museum Studies. The recipients will also be entitled to a travel grant not exceeding Rs. 1,000 per annum and an equipment grant of Rs. 500. The fellowships are tenable for one year in the first

according to the report of the Committee for Commonwealth University Interchange for the year ending March 1963. In all, 110 scholars from various Commonwealth universities were recipients of the grants which amounted to £17,654. The expenditure was distributed as follows among the three categories of visitors :

Category of Scholars	Total Value of Grants	Total Number of Grants	Number of Grants to Indians
Category A (University teachers or officers on recognised study leave) :	£10,025	64	23
Category B (Distinguished university scholars invited for short visits) :	£3,259	11	1
Category C (Post-graduate university research workers) :	£4,370	35	9

instance, but may be renewed annually up to not more than three years.

Applications for the fellowships to be awarded during the current financial year (1963-64) should be made to the Secretary, Ministry of SR & CA through the Government of the State to which the applicant belongs.

West German Fellowships

The Alexander von Humboldt Foundation of the Federal Republic of Germany is offering fellowships for advanced academic research at West German universities and research institutes during the year 1964-65. Eligibility : (i) A degree or diploma equivalent to the German doctorate or "Staatsexamen" (State Research Diploma) in the field of interest plus two years' teaching or research experience; (ii) sufficient knowledge of German; (iii) age not more than 35 years. The grantee will be paid DM 800 (Rs. 940) p.m. for one academic year (October to July). Travel grant admissible. Applications on prescribed forms to reach the German Academic Exchange Service, New Delhi, or to one of the Consulates of the Federal Republic of Germany in Bombay, Calcutta and Madras by September 30, 1963.

U.G.C. Awards for 34 Retired Teachers

Under the scheme for utilisation of services of retired teachers, UGC has selected 34 teachers this year. Among those selected are : Dr. R.N. Sen (Mathematics) ; Dr. S.R. Khastgir (Physics) ; Dr. P.B. Sarkar (Chemistry) ; Dr. D.V. Bal (Zoology) ; Dr. R. Vishwanathan (Medicine) ; Dr. Jaswant Singh (Agriculture) ; Dr. Hari Ram Gupta (History) ; Dr. N.V. Banerjee (Philosophy) ; Dr. Suryakant (Sanskrit) ; and Shri Syed Masud Hasan (Urdu).

The scheme provides for payment of an honorarium of Rs. 4,000 per year plus a contingent grant of Rs. 1,000 per year to selected teachers, and is intended to assist universities and colleges to avail themselves of the services of veteran scholars in teaching and research.

Regional Colleges of Education

Medical Education

The scope of training teachers for higher secondary and multipurpose schools has been considerably broadened with the opening of three Regional Colleges of Education this year at Bhubaneswar, Ajmer and Mysore. A fourth college at Bhopal will start functioning next year.

The colleges, set up by the National Council of Educational Research and Training, are residential institutions, each with an intake capacity of 300 students. A demonstrative multipurpose school will be established on each college campus to serve both as the participating school in the college and the laboratory where experimental work on new courses and studies could be carried out.

Each college is affiliated to a university in its respective region. The Regional College of Education at Bhubaneswar is affiliated to Utkal University, the Ajmer College to Rajasthan University, and the one at Mysore to Mysore University. The Regional College, Bhopal, will be affiliated to Vikram University.

Courses of Study

These colleges will offer two kinds of courses: a four-year integrated course in Science and Technology for students having completed higher secondary education, and a one-year course for graduates in Science, Technology, Agriculture, Commerce, Fine Arts and Home Science. To begin with the four-year course will be conducted by the colleges at Bhubaneswar and Ajmer; the other two will introduce these courses at a subsequent stage. Similarly, the one-year course will be initially started at Mysore and Bhopal with candidates drawn mostly from amongst school teachers.

The four-year course presents an integrated sequence of general, professional and content education as opposed to a separate three-year degree course plus a one-year teacher education course. It aims at achieving professional competence equivalent to the B.Sc. plus B.Ed./B.T. degrees and is expected to expose the students to a broad and systematic approach to Science.

The colleges will also offer in-service courses for existing teachers.

Students accepted at these colleges for the four-year course will receive scholarships at the rate of Rs. 75 per month for the first three years and Rs. 100 per month during the fourth year. The one-year course student will receive Rs. 75 per month. There will be no tuition fee.

Big Step Forward

The setting up of the Regional Colleges of Education is a big step forward towards streamlining the programme of multipurpose schools which was initiated in 1954 to meet the varied abilities and aptitudes of pupils and prepare them for their social responsibilities. During the last seven years, about 2,000 multipurpose schools have been established in the country, offering a large number of courses of diversified types. The target for 1965-66 is 2,446. As the teacher is the keystone of this programme, the training of teachers for multipurpose schools has been given high priority in the Third Five-Year Plan.

The colleges also fulfil the longfelt need for a teacher-training programme aimed at improving Science education at higher secondary stage.

The entire project is estimated to cost Rs. 3 crores. The State Governments concerned have granted 100 acres of land each for the construction of the college buildings. The United States Agency for International Development (USAID) is providing educational consultants and will contribute equipment and books worth Rs. 14.34 lakhs. In addition, the Agency will arrange for the training of 20 staff members at Ohio State University. The project will also receive Unesco assistance to the tune of Rs. 50 lakhs in the form of equipment, experts and fellowships for the Science Departments of the four colleges.

Institute of Post-graduate Medical Education

The Prime Minister, Shri Jawaharlal Nehru, formally inaugurated the Institute of Post-graduate Medical Education at Chandigarh on July 7.

The Institute will specialise in research in indigenous drugs, heart and brain surgery, corneal grafting and microsurgery of the ear, and will train teachers for medical colleges and specialists for various upgraded hospitals in the country. A well-equipped 250-bed hospital is already functioning.

The Institute will admit 100 students every year for post-graduate studies in 10 different disciplines of Medicine. Each student will be paid a monthly stipend of Rs. 200 and would be required to live within the premises of the Institute till the completion of the three-year course.

Nuclear Medicine Institute

The Institute of Nuclear Medicine and Allied Sciences, set up by the Research & Development Organisation of the Ministry of Defence, has started functioning in Delhi with the object of promoting the growth of Nuclear Medicine.

Apart from offering radio-medical treatment at its field unit located at Safdarjung Hospital, Delhi, it is engaged in medicinal researches by isotopes and is carrying on an educational and training programme for physicians and allied scientists. It has been recognised by Delhi University as one of the major institutions for running post-graduate diploma courses in Radiation Medicine.

Radiation Medicine Centre

A Radiation Medicine Centre is being set up in the Medical Division of the Atomic Energy Establishment, Trombay, and will be located initially in the Tata Memorial Hospital, Bombay.

The U. S. Government is providing equipment worth over \$ 12,000 for the Centre, and the International Atomic Energy Agency has agreed to provide the services of Dr. Myron B. Pollock, of the University of California, as a consultant.

Compulsory N.C.C. Scheme Inaugurated

At about 2,000 centres all over the country, more than 1.2 million NCC cadets participated in a pledge-taking ceremony on August 14 and 15. The ceremony marked the inauguration of the compulsory NCC training scheme in Indian universities.

In Delhi, the Prime Minister, Shri Jawaharlal Nehru, inspected a 120-cadet guard of honour, and over 14,000 NCC cadets from local colleges and schools were administered the oath by the Director-General of NCC, Major-General Virendra Singh. Among those who witnessed the ceremony were the Defence Minister, Shri Y.B. Chavan; Chief of the Army Staff, Gen. J. N. Chaudhury; the Union Education Minister, Dr. K.L. Shrivastava; and Dr. C.D. Deshmukh, Vice-Chancellor, Delhi University.

The Prime Minister in his address told the cadets: "It gives me courage to see you taking part in this parade. Your taking pledge to serve the country a day before Independence Day has a special significance."

N.C.C. Not to Affect Other Activities

Maj.-Gen. Virendra Singh, Director-General of NCC, stated in New Delhi recently that the compulsory NCC scheme would not interfere with the academic, cultural or sports activities of students. He explained that the training would be integrated with the general curricula of colleges and would be imparted twice for a total of four hours in a week. It was for the colleges to adjust the two NCC periods in their weekly time-table, he added.

N.C.C. & Sports

National Physical Efficiency Drive

The all-India seminar on National Physical Efficiency Drive, held at Taradevi (Simla Hills) from July 1 to 4, recommended the establishment of one or two permanent centres for the Drive in each State.

The seminar, which was attended by about 30 delegates from various parts of the country, was the third in the series sponsored by the Union Ministry of Education to discuss ways and means to give further acceleration to the scheme.

Since the National Physical Efficiency Drive was launched in 1960, nearly 3.5 lakh youths and adults have been covered by it.

Inaugurating the seminar, Shri M.R. Krishna, Parliamentary Secretary to the Ministry of Education, stressed the need for making the country "physical fitness conscious". Industrial labour and Government employees, he suggested, should be encouraged to take tests in physical efficiency. Rural folks, and university students should also participate in these tests on a larger scale and should feel a sense of pride in winning State Awards for physical fitness.

Shri R.K. Kapoor, Joint Educational Adviser to the Ministry of Education, said that the country should develop the cult of physical fitness and the Greek tradition of 'body beautiful'.

Dr. B.D. Laroia, Secretary, Inter-University Board of India, who attended the seminar on behalf of Indian universities, stressed the need on the part of UPSC and other selection boards, including admission committees in colleges and universities, to give preference to those candidates who had shown proficiency in games, sports and physical fitness.

Sports Institute's New Board of Governors

The constitution of the Board of Governors of the National Institute of Sports, Patiala, was announced on July 25. There are 10 members on the Board for a term of three years and one more member is to be nominated at a later date. Shri M. R. Krishna, Parliamentary Secretary to the Union Education Minister, is the chairman of the new Board and Lt.-Gen. Sam Singh, Director of the Institute, is member secretary.

The Institute has been set up by the Ministry of Education to impart specialist training in various branches of sports and games. It started its regular courses of training from July this year. Hitherto it has been running *ad hoc* training courses of six months' duration in Hockey, Cricket, Football, Gymnastics, Athletics, Volleyball, Tennis, Badminton, Wrestling and Swimming.

All-India Council of Sports

The All-India Council of Sports has been reconstituted for the next term of two years. His Highness the Maharaja of Patiala has been re-nominated its president. Shri P.K. Kathpalia, Deputy Secretary in the Ministry of Education, will act as secretary to the new Council.

● It is learnt that the Ministry of Education has decided to revive Inter-University Youth Festivals and that one will be held this year.

● The Government College for Women affiliated to Kurukshetra University has been converted into Sports College for Women, and 65 athletes have already joined.

● Rajasthan University's swimming pool, the biggest of its kind in Rajasthan and having all the up-to-date facilities of a modern pool, was declared open at the university campus by the Maharaja of Patiala on August 17.

UNIVERSITY NEWS is issued every alternate month. Price per copy: 50 pP, plus postage. Annual subscription: Rs. 3 Sh. 6 P (by surface mail); Rs. 6 Sh. 18 P (air-mail). Remittance should be made by Money Order Postal Order/ Crossed Cheque (adding the bank commission if the cheque is realised out of Delhi) in the name of the Editor, UNIVERSITY NEWS c/o, the Inter-University Board of India, Rouse Avenue, New Delhi-1. Please note that we normally do not send the journal per VPP.

ADVERTISEMENT RATES

Space	Per Insertion	For 4 Insertions
Full Page (18x24 cm.)	Rs. 300	Rs. 1,000
Half Page	Rs. 175	Rs. 600
Quarter Page	Rs. 100	Rs. 350
5.5x6 cm. space (17 lines)	Rs. 40	Rs. 100

DR. A. L. MEDALIAR has been appointed Vice-Chancellor of Madras University for the eighth time in succession.

SHRI D. C. PAVATE has been nominated Vice-Chancellor of Karnatak University for the fourth time in succession.

DR. B. B. MISRA assumed charge of the office of the Vice-Chancellor of Bhubaneswar University on August 8, 1963.

SHRI T. M. ADVANI took over as Vice-Chancellor of Jammu & Kashmir University on July 23, 1963.

PROF. G. D. PARIKH has been re-appointed Rector of Bombay University with effect from July 17, 1963.

SHRI K. P. GROVIL has been appointed Registrar of Jabalpur University with effect from June 23, 1963.

SHRI V. SHANKARAN has been appointed Registrar of Vikram University with effect from July 13, 1963.

SHRI C. DAS, Academic Registrar, has assumed charge of the office of the Registrar, Gauhati University, with effect from June 26, 1963.

PERSONAL

DR. D. J. HENKEL, at present Senior Lecturer at the Imperial College of Science & Technology, London, has been appointed Professor of Soil Mechanics at the College of Engineering & Technology, New Delhi, for three years.

DR. W. P. CUMMING, Fulbright Professor of English under the USEFI scheme, has taken up his assignment at Annamalai University.

MR. PETER MCGREGOR and MR. MARK HORLINGS, two American tutors in English under the same scheme, have also taken up their assignments at Annamalai University.

MR. ARTHUR LALL, former permanent Indian representative at the United Nations, has resigned from the Indian Foreign Service to become Professor of International Affairs at Cornell University (U.S.A.).

DR. VIKRAM A. SARABHAI, Chairman of the Indian National Committee for Space Research, has been appointed Chairman of the consul-

tative group, constituted by the Committee on Space Research of the International Council of Scientific Unions, to enquire into the possibility of any harmful effects resulting from proposed space experiments.

SHRI KAFIL AHMED CHOWDHARY, Head of the Department of Botany and Dean of the Faculty of Science, Aligarh Muslim University, has been appointed Honorary Vice-President of the 10th International Botanical Congress to be held in Edinburgh in August 1964.

DR. C. RADHAKRISHNA RAO, of the Indian Statistical Institute, Calcutta, is one of 38 senior foreign scientists selected under a fellowship programme just initiated by the National Science Foundation of America. Dr. Rao will teach Mathematics at John Hopkins University from September 1963 to June 1964.

We record with deep regret the death of Prof. S.K. Mitra, F.R.S., National Professor of Physics and pioneer of radio research in India. Prof. Mitra had been closely associated with the CSIR Radio Research Committee since its inception in 1943.

A Must for Every Research Laboratory

MSE AUTOMATIC "SUPER-SPEED 50" CENTRIFUGE

Speed 50,000 R.P.M. (equal to 200,000xg)

* Fully Automatic * Simple and safe to operate

Available with standard range of Rotors designed to meet users' varied operating priorities complete with stainless steel and polypropylene tubes.

Suitable for virus studies, concentration of polymers of high molecular weight, density gradient work, clarification of suspensions to obtain cell-free extracts, isolation of concentrates of intra-cellular components and numerous other applications.

Manufactured by:

MEASURING AND SCIENTIFIC EQUIPMENT LIMITED

SPENSER STREET, LONDON S.W.1.

For full details please contact Sales Agents in India:

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LIMITED

India House,
Fort Street,
BOMBAY

Sunlight Building,
26/27 Asaf Ali Road,
NEW DELHI

85 Giffanders House,
Post Box No. 2136,
CALCUTTA

(Contd. from page 3)

universities would need to recruit 2,000 teachers. He felt that reliance on expatriate staff was inevitable in the early stages of growth of new African universities and anticipated that a considerable number of teachers would go from Britain.

Mr. Badr-ud-Din Tyabji, Vice-Chancellor, Aligarh Muslim University, and Prof. Samuel Mathai, Vice-Chancellor, Kerala University, also dealt with the question of exchange of students and teachers.

A plea for students from the developed countries to make use of the scholarships offered by the

universities in the underdeveloped countries came from Dr. V.S. Jha, until recently Director of the Commonwealth Education Liaison Unit in London. Mr. A. L. P. Norrington, Principal, Trinity College, Oxford, supported Dr. Jha's demand.

After the close of the London congress on July 19, heads of member institutions of the Association of Universities of the Commonwealth met in a private session at St. Andrews University (Scotland) from July 20 to 23.

Some of the problems which had faced the congress of Commonwealth

universities were referred to by Dr. D.C. Pavate, Vice-Chancellor, Karnatak University, in an interview given in Edinburgh after the conclusion of the St. Andrews meeting. "The biggest problem is how to control numbers or to find additional teachers to cope with them," he observed.

Dr. Pavate said. "Apart from discussions about university problems we have had very good social contacts with the delegates of universities from all over the Commonwealth. Informal discussions on the various problems we faced were most valuable."

For

QUALITY & RELIABILITY

Insist on Indian Make

Toshniwal

**LABORATORY
ELECTRONICS
ENGINEERING & INDUSTRIAL
INSTRUMENTS**

Contact :

TOSHWIWA BROTHERS PRIVATE LTD.

198, Jamshedji Tata Road, Bombay-1

Branches :

Kacheri Road,
Ajmer.

85-A Sarat Bose Road,
Calcutta-26.

3E/8 Jhandewalan Extn.,
New Delhi-1.

Round Tana, Mount
Road, Madras-2.

INSTRUMENTS

of quality

for

**EDUCATION
RESEARCH
INDUSTRY**

Complete range available

Estd. 1897—First Firm in the Country

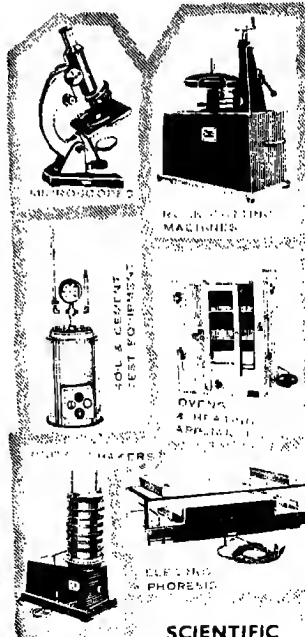
HARGOLAL AND SONS

Science Apparatus Workshop

H.O. AMBALA CANTT.

Also at: Madras, Hyderabad, Dehra Dun, Lucknow

**SEW
INSTRUMENTS**



**SCIENTIFIC
EQUIPMENT WORKS**

1777 NICHOLSON ROAD,

DELHI - 5

FOR
CONTEMPORARY
ARTICLES OF OPINION
READ

The
American
Review
A QUARTERLY

The AMERICAN REVIEW is an informative magazine containing authoritative articles by eminent educationists and authors on all aspects of American life and civilization. The subjects covered include art, literature and philosophy, economics, science, sociology, education and law.

Mail this order form
to the nearest
principal subscription
agent below :

M/s. Lalvani Bros.
Taj Building
210 Dr. D.N. Road
Bombay-1.

M/s. Patrika Syndicate (P) Ltd.
Gole Market 12/1 Lindsay St.
New Delhi-1. Calcutta-16.

The Swadesamitran Ltd.
Victory House
Mount Road
Madras-2.

ORDER FORM

Please send

THE AMERICAN REVIEW

1 YEAR (4) ISSUES ☐ Rs. 3.00
2 YEARS (8) ISSUES ☐ Rs. 5.00

NAME.....

ADDRESS & P.O.....

CITY.....ZONE.....

DISTRICT.....STATE.....

I enclose payment of Rs.....by
cheque/postal order.

Date.....Signature.....

For the man who knows where he's going....

The FOUNDATIONS OF MODERN BIOLOGY Series
price Rs. 2.10 a copy.

THE CELL Swanson.

HEREDITY Banner.

ADAPTATION Wallace & Srb.

MAN IN NATURE Bates.

THE PLANT KINGDOM Bald.

THE LIFE OF THE GREEN PLANT
Galston.

ANIMAL GROWTH & DEVELOPMENT Sussman.

ANIMAL PHYSIOLOGY Scemids-Nielsen.

CELLULAR PHYSIOLOGY & BIO-CHEMISTRY McElroy.

ANIMAL BEHAVIOR Dethier & Stellar.

ANIMAL DIVERSITY Hanson.
(Sets of these volumes are also available in cloth-bound library editions; Rs. 47.9. nP, a set).

Eastern Economy Edition

Prentice-Hall's EASTERN ECONOMY EDITIONS are complete, unabridged reproductions published in India of the latest American Technical, Scientific and General books recommended by most Indian Universities to enable students to enjoy, *inexpensively* the personal ownership of vital textbooks and the benefits of a comprehensive education.

ENGINEERING MATERIALS SCIENCE
Cadric W. Richards Rs. 12.60.

CREATIVE ENGINEERING ANALYSIS
Fredrick L. Ryder Rs. 8.40.

PHYSICAL CHEMISTRY William P. Sheehan Rs. 14.70.

ELEMENTS OF PHYSICAL GEOGRAPHY Van Valkenburg & Stetzel, Rs. 7.50.

THE FAR EAST Paul H. Clyde Rs. 9.75.

NUMERICAL METHODS IN ENGINEERING Solvadari & Baran Rs. 9.75.

ENGINEERING MECHANICS Irving H. Shames Rs. 8.40.

PHYSICS: FOUNDATIONS & FRONTIERS Gamow & Cleveland Rs. 6.00.

INTRODUCTION TO SOCIAL WELFARE Walter A. Friedlander Rs. 12.60.



Published in India exclusively by



Prentice-Hall of India

PRIVATE LIMITED

M-97, Agarwal Building, Connaught Circus,
NEW DELHI.

Low Priced Scientific and Technical Books reprinted in India with the Assistance of the Joint Indian-American Standard Works Programme.



ALLIED PACIFIC PRIVATE LTD.

Great Social Building, 60 Sir P. Mehta Road, Bombay-1.

Just Released

By special arrangement with McGRAW-HILL BOOK COMPANY of New York

4th edition of Jones' FARM GAS ENGINES AND TRACTORS { Our price : Rs. 15
Original price : Rs. 49.75

Other McGRAW-HILL titles available :

	Indian Price	Original Price
Kimball & Kimball, PRINCIPLES OF INDUSTRIAL ORGANIZATION ...	Rs. 12.50	Rs. 36.25
Eckles & Hale, BRITAIN, HER PEOPLES AND THE COMMONWEALTH ...	Rs. 12.50	Rs. 37.50
Kennard, KINETIC THEORY OF GASES ...	Rs. 15.00	Rs. 47.50
Brown, FARM ELECTRIFICATION ...	Rs. 12.50	Rs. 38.75
Turner & Verhoogen, IGNEOUS AND METAMORPHIC PETROLOGY ...	Rs. 20.00	Rs. 60.00

Catalog will be mailed upon request.

The ENGLISH LANGUAGE BOOK SOCIETY

&

Leading British Publishers

ANNOUNCE

Their **LOW-PRICED TEXTBOOK** Series in ►

Each title carries its distinctive coloured Label

(Dark Red 21s./Rs. 14; Green 15s./Rs. 10
Orange 12s./Rs. 8; and Blue 9s./Rs. 6)

AGRICULTURE
BUSINESS ADMINISTRATION
CHEMISTRY
ECONOMICS
ENGINEERING
MATHEMATICS
PHYSICS

The use of special measures has made the reduction possible, but in every case the original text and diagrams have been retained.

Please ask your bookseller to show you his stock of the series.

Watch also for announcements of other series which the Society is planning for the non-specialist.

Chagla Calls for Greater Accent on Calibre in Technical Education

"The business of engineering education is no more narrow specialisation in certain technical disciplines: it has a wider social significance in the modern world"—thus observed Shri M.C. Chagla, Union Education Minister, while addressing the 16th meeting of the All-India Council for Technical Education in New Delhi on December 8.

In the meeting were present teachers of Engineering and Technology, Principals of engineering colleges, Vice-Chancellors, industrialists, administrators, Members of Parliament, State Education Ministers, and the Chief Minister of Punjab, Shri Partap Singh Kairon.

Reviewing the problem of standards in a broader perspective of advancing science and technology, Shri Chagla pointed out that the impact of technology on society was twofold: first, quick adaptability to change; second, an awareness of the social and economic consequences.

"Our future engineers should not only be specialists in their own fields but should be capable of looking well beyond their own fields, understand the inter-relationships of different disciplines and co-ordinate a diversity of skills, techniques, materials and experiences in the solution of human and engineering problems."

'Phenomenal' Expansion

Earlier, Shri Chagla referred to the "phenomenal" expansion of technical education in the country and said a six-to-eightfold increase in facilities within a period of about 15 years was unprecedented in any developing country. At the commencement of the First Five Year Plan there were 49 institutions for the first degree courses with 4,120 admissions and 86 institutions for diploma courses with 5,900 admissions. The number of engineering colleges has since risen to 126 with 20,500 admissions and of polytechnics to 280 with



Shri M.C. Chagla

40,000 admissions. By the end of the Third Plan the admissions will reach 24,000 for degree and 50,000 for diploma courses, thus exceeding the physical targets set for the Plan, i.e. 20,000 fresh admissions to first degree courses and 40,000 to diploma courses.

The Education Minister said while a certain amount of expansion in a purely physical sense was necessary, we should address ourselves in right earnest to the question of consolidating and improving what had already been achieved. For it would be a matter of poor consolation if only the physical targets were reached but

(Contd. on page 20 col.1)

INTER-UNIVERSITY BOARD MEETING AT VARANASI

Vice-Chancellors of 42 member universities and the Director of the Indian Agricultural Research Institute, which is an associate member, will attend the 39th annual meeting and ninth quinquennial conference of the Inter-University Board of India to be held at Banaras Hindu University, Varanasi, from December 29 to 31.

The conference will be inaugurated by Dr Karan Singh, Sadar-i-Riyasat of Jammu & Kashmir and Chancellor of Banaras Hindu University, and will be presided over by Dr Triguna Sen, Rector, Jadavpur University.

In addition to the Vice-Chancellors, member universities have deputed 64 delegates to participate in the quinquennial conference. Vice-Chancellors of five other universities (Jodhpur, Punjabi, Shivaji, Udaipur and Varanaseya Sanskrit Vishwavidyalaya) and Directors of the five Indian Institutes of Technology who have applied for affiliation to the Board, and representatives of the Rockefeller Foundation, Asia Foundation, Ford Foundation, U.S. Educational Foundation, USIS, British Council and German Academic Exchange have been invited to attend the conference as observers.

Foreign Invitees

Among the foreign invitees, Dr. Prachar Chomchai, Secretary Association of South East Asian Institutions of Higher Learning, Bangkok; and Shri Randhir Subba, Vice-Chancellor, Tribhuvan University, Kathmandu, will attend.

Also present will be representatives of the Ministries of Education, Scientific Research and Cultural Affairs, Health, Food & Agriculture, and Community Development & Co-operation; Planning Commission; UGC; and Directorate of I.C.C.

(Contd. on page 23 col. 1)

Study of Freedom Struggle at Indian Universities

The Prime Minister, is understood to have suggested that India's freedom struggle should form a subject of serious study at the universities and colleges. His suggestion, communicated some time back to the erstwhile Union Education Minister, Dr. K.L. Shrivastava, arises from the feeling that the information at present given to students on this subject is very scrappy and deals chiefly with prominent individuals, without referring to the deeper nature and causes of the struggle.

The importance of imparting knowledge to university students about pre-independence events which gave birth to the present-day India, is stressed in many quarters and it is sometimes feared that the present generation of students is growing up without any knowledge or memory of the Indian National Movement.

India's freedom struggle is at present mainly studied as part of the optional subjects like History, Political Science, Sociology etc. It forms part of the papers on Modern Indian History and Constitutional History of India at the undergraduate and post-graduate levels at various universities. Indian National Movement and Constitutional Growth constitutes a compulsory paper in Political Science for the degree examination of the Universities of Agra, Banaras, Bhopalpur, Bihar, Delhi, Jabalpur, Kurukshetra, Mysore, Rajasthan, Ranchi and S. Vallabhbhai Vidyapeeth.

Part of General Education

It is hoped that steps will now be taken to intensify the study of recent Indian history at Indian universities and colleges as part of the General Education programme and under the courses prescribed for English and the regional languages.

Post-graduate Courses at Rural Institutes

Post-graduate courses in "Rural Sociology and Community Development" and "Rural Economics and Co-operation" have been started in some selected Rural Institutes. Each course is of two years' duration after B.A. or the three-year diploma examination in Rural Services.

These courses have been recognised by UPSC as equivalent to a Master's degree. The question of their being recognised by the universities is under negotiation with the Inter-University Board of India.

Training-cum-Production Centres

The University Grants Commission is considering the possibility of giving a new orientation to the scheme relating to the establishment of hobby workshops in colleges and universities by converting the workshops into small training-cum-production centres. So far sanction has been given for the construction of hobby workshops in 68 colleges and 14 universities.

The proposal has been made on account of the fact that the scheme for the establishment of industrial estates in universities has not made any headway. Two projects were approved for the Universities of Baroda and Jadavpur, but these have not been implemented so far.

A pilot production-cum-training centre has been started at Roorkee University. The centre has a carpentry shop, a foundry shop and a fractional horse-power motor manufacturing shop with a small die and tools room. The capital grant sanctioned for the carpentry and foundry shops is Rs. 3,21,300 and for the fractional horse-power motor manufacturing shop Rs. 3,47,000.

Railway Concessions

From November 1, the Railway Board has revived travel concession to parties of students of recognised schools and colleges proceeding on educational tours. The concession will be available to parties of not less than ten and only when such tours are necessary parts of the curriculum.

Students of educational institutions of foreign countries in parties of not less than 13 have been allowed concession for railway journeys for educational purposes or for visiting historical and other places of interest in India. For foreign students studying in India, the concession is available to parties of 10 and above.

These steps constitute only a partial revival of the students' travel concessions withdrawn in January this year following the emergency. Sports teams are still denied the concession.

Chagla on Examination Reforms

Shri M. C. Chagla, Minister of Education, underlined the need for immediate examination reform to avoid the high percentage of failures at the end of secondary education when he addressed the concluding session of the four-day conference of Chairmen and Secretaries of the Boards of Secondary Education on November 30 in New Delhi. He described the failures—about 50%—as "a national calamity and terrible waste of human resources in the country".

Shri Chagla pointed out that as secondary education was the gateway to higher education, its standards should be very high; otherwise university education was bound to suffer in the long run.

Outlining some of the ways in which the examination system could be improved, Shri Chagla said that in the U.S.A. it had been found that category of students did not shape well in examinations because of nervousness or some other reason. Therefore, there was more and more reliance on the progress of students in the course of studies.

Earlier, inaugurating the conference, Shri P.N. Kirpal, Education Secretary, enumerated the various steps taken towards examination reform, including the organisation of a series of workshops for training paper-setters in the techniques of evaluation. He appealed for greater attention on the improvement of question papers.

SARDAR PANIKKAR

We record with deep regret the death of Shri K. M. Panikkar, Vice-Chancellor of Mysore University and a member of the Inter-University Board of India. Sardar Panikkar died of a heart attack in Mysore on December 10. He was 68.

Scholar, eminent historian, journalist, author, educationist, administrator and diplomat, Sardar Panikkar distinguished himself in all spheres of life in which he took interest. Before taking up the Vice-Chancellorship of Mysore University in July this year, he was the Vice-Chancellor of Jammu & Kashmir University.

12-Year Secondary Course the Ultimate Goal

The three-day conference of State Education Ministers and Vice-Chancellors, held in New Delhi from November 10 to 12, proposed 12 years of secondary education as the ultimate goal towards which the country must work, "even though considerations of finance and manpower may not make it possible to implement such a scheme in all States in the immediate future".

The conference recommended that special assistance by the Centre should be given to all States which wished to raise the educational period at the secondary level. This assistance may be given through a grant by UGC in case the additional class was attached (as pre-university) to a college or by the Central Government direct in case the class was attached to a school.

The standard to be achieved at the end of secondary education should be raised so as to be equivalent at least to the intermediate examination of the former four-year degree course. Except for the academic courses in humanities and sciences, the other courses should be job-oriented with a view to making the products of secondary education fit for employment in agriculture, industry, trade, commerce or other vocations. Provision should, however, be made for those who wished to take up higher education at a later stage.

Age of Entry

On the issue of the age of entry into university the conference resolved that "it should generally be 17 plus and in no case less than 16 plus". The duration of the first degree course in arts and science should be three years, and special assistance by the Centre should be given wherever this involved the addition of one year.

Secondary Council's Decision

A total schooling of 12 years was also recommended as the desirable national pattern of secondary education by the All-India Council for Secondary Education which met earlier in New Delhi on October 28 and 29.

The Council suggested that the last four years of schooling should constitute the secondary stage of education. An examination called Higher Secondary Part I should be provided at the end of the first two

years of the secondary stage (i.e. class X); the examination at the end of the secondary stage (12 years) should be called the Higher Secondary Part II examination. The standard to be attained at the end of the secondary stage should approximate to the old intermediate course and should make the student eligible for admission to the three-year degree course without the necessity of having to go through any other pre-university course.

The Council emphasized that all States and Union Territories should take effective steps to move towards achieving such a pattern, having an underlying uniformity throughout the country, "within a reasonable time, and no step should be taken which runs counter to the national pattern".

Education Minister Cautions Against Hasty Changeover from English

Addressing the Education Ministry's Parliamentary Informal Consultative Committee on December 6, the Union Education Minister, Shri M.C. Chagla, cautioned against any hasty step towards a changeover from English to regional languages in universities.

Shri Chagla said that with the formation of linguistic States it was inevitable that regional languages should ultimately become the medium of instruction, but this must be gradual and the main consideration in the changeover should be the overriding unity and integration of the country. Each university should decide the pace of transition to the regional language and every possible precaution should be taken not to lower the standards.

Hindi as Link Language

He was of the view that Hindi should ultimately be the link language inside India and English the link language with the outside world. New developments in science were so rapid that it would not be possible for regional languages to be used for science subjects at the highest level in the

Making Education a Concurrent Subject

Shri M.C. Chagla told the Lok Sabha on December 13 that he proposed to take up with the State Governments the desirability of making education a concurrent subject in the interest of national integration.

The Government of India, on the recommendation of the Informal Consultative Committee of Parliament on Education, has already appointed an eight-member committee of Members of Parliament on higher education under the chairmanship of Shri P.N. Sapru to examine the provisions of the Constitution regarding the responsibility of the Central Government in the field of higher education with a view to finding out the extent to which the Centre could assume greater responsibility in this field and to suggest appropriate steps to be taken for the purpose. This committee has circulated a questionnaire to various State Governments, universities and some prominent educationists to elicit their opinion in the matter.

near future. So long as English continued to be the medium at the university stage, standard of English should be maintained at a high level in secondary schools.

In the discussion which followed, Members of Parliament made various suggestions, including the need for a standard dictionary in Hindi and other regional languages; encouragement to learning of Sanskrit; switching over to a bilingual pattern in school and university education; improvement of standard of the English language; and production of more literature in regional languages.

The Members further suggested that in the field of higher education the Centre should exercise greater responsibility and control in order to ensure better co-ordination and higher standards.

Tribhuvan Varsity's First Honorary Degree

Dr. S. Radhakrishnan on November 7 became the first recipient of the honorary degree of Doctor of Literature of Nepal's Tribhuvan University.

The Chancellor, King Mahendra, while conferring the doctorate on the visiting Indian President at a special convocation, said: "This infant university is fortunate to have a name such as Dr. Radhakrishnan's to head the list of its graduates of the highest distinction."

The citation by Vice-Chancellor Randhir Shisba described Dr. Radhakrishnan as an outstanding exponent of Hindu ideals which were the common glory of Nepal and India.

"Constant communion, as it were, with the ancient seers and sages have vested his utterances with lofty ideals, lent authority to his views and made him the perfect embodiment of Hindu culture at its best."

Replying, the President said: "The fundamental concepts and basic values being evolved here in the shelter of the Himalayas are of permanent value. These ideals of Truth, Beauty and Love are eternal."

Osmania Honours King Hussein

Osmania University on December 12 conferred the honorary degree of Doctor of Laws on King Hussein of Jordan at a special convocation.

The Vice-Chancellor, Dr. D.S. Reddi, in his citation said:

"In honouring His Majesty, we are honouring a heroic youth who, instead of leading a life of ease, has chosen to lead the strenuous life of a dedicated servant of the people. By his selfless devotion to the welfare of his people he has realised another cherished ambition of his that he should be addressed by the people not as King Hussein but as 'Our Hussein'. In conferring the degree of Doctor of Laws of this university we are not only making him an alumnus of this university but are sharing the privilege with his people of calling him 'Our Hussein'."

Australian Students to Tour India

During December-January, 100 Australian university students are coming to India for a 10-week trip. They will spend part of their time living with Indian families and the remainder travelling independently in groups of two or three. A selected group of 20 students will spend part of their trip at Service Civil International work camps on special projects.

The tour, organised by Australian Overseas Student Travel, is intended to impart the Australian students a better understanding of the Indian people and their way of life. When these students return to Australia, they will give talks on India to clubs and other interested organisations.

The leader of the tour will be Mr. Howard McCorkell, a final year student of Architecture at the University of Melbourne. While in India, he is expected to make arrangements for a reciprocal visit of Indian university students to Australia.

Since 1960, 100 Australian university students have made organised visits to India.

Practical Training in Japan

Indian students can now look forward to studying latest industrial techniques and advanced scientific developments in Japanese industrial establishments and State enterprises. The facilities will be provided under the Asian Scholarships Programme of the Japan Science Foundation.

The Foundation plans to invite students from India and other South East Asian countries for practical training in scientific and industrial fields. The first group will be selected early next year. The training programme will start in April 1964.

Indian Cultural Institute for Lima

In New Delhi on October 16 the Peruvian Envoy, Mr. Eduardo Sarmiento, received a set of 30 books on Indian culture from Shri A.K. Ghosh, Secretary, Ministry of Scientific Research and Cultural Affairs.

Accepting the gift, the Peruvian Minister said the books would be utilised for starting an Indian cultural institute at the University of Lima, which was founded in 1541—only 50 years after Columbus discovered America.



Dr. D.S. Reddi, Vice-Chancellor, Osmania University, and Dr. Potdar, Vice-Chancellor, Poona University, with Indian students at Moscow's Friendship University which they visited during their recent tour of the Soviet Union. The Rector of the University, Dr. Erzin, is on extreme right.

Indian Students Abroad

About three-fourths of the Indian students abroad are engaged in scientific, technical or medical pursuits. This is in sharp contrast to the general trend in the pre-Independence days when most of those who went abroad went to England for I.C.S. or Law or at best for F.R.C.S.

Since Independence more and more Indian students have been going abroad for higher education or training. More and more foreign countries have been granting scholarships and fellowships every year and Indian students have been making use of them in larger and larger number. At the beginning of 1962, as many as 12,241 Indian students were studying or receiving training at 35 different countries all over the world.

A subject-wise analysis of these students shows that 35.8% were studying Engineering and Technology, 13.3% Science, 10.0% Medicine and Veterinary Science, and 3.4% were studying Agriculture, Forestry and Fishery. Thus Science, Engineering, Technology, Medicine, Veterinary Science, Agriculture, Forestry and Fishery alone accounted for 71.4% of the total. Students taking up courses in Arts, Commerce, Education and Law accounted for only 20.4%...

Country-wise Distribution

America had the maximum number of Indian students (6,376), followed by West Germany (3,625) and Britain (3,046). It is interesting to note that in all faculties, except Medicine, America has drawn the maximum number of students. For Medicine students from India seem to prefer the United Kingdom. In 1962 the number of students studying Medicine in Britain was 1,302.

Academic Exchanges with Nepal

The Ministry of Scientific Research & Cultural Affairs is understood to be considering a proposal to bring about closer cultural ties with Nepal through academic exchanges.

Hitherto Indian Research scholars have been going to Nepal for comparatively brief periods to examine local materials. Their contact with local scholars has

'ONE BRIGHT FLOWER'

John F. Kennedy, 35th President of the United States of America, whose assassination last month shook the conscience of the world, had yet another aspect to his faith in international co-operation and peace—he regarded the teacher-exchange programme as "one bright flower" in recent world history.

Mr. Kennedy esteemed teachers as front-line workers for world peace



The late John F. Kennedy

and understanding. They achieve this lofty goal by helping the masses to make judgements on complicated and fairly sophisticated matters which affect that peace, he told some 200 visiting foreign teachers from 21 countries, including nine from India, when he received them in the White House garden late in August.

Teacher exchanges, he noted, were relatively new compared to the ancient wanderings of scholars in search of knowledge. "The teacher-exchange programme is one bright flower in recent world history and I welcome it very much," he declared.

been individual and personal. It is now proposed to maintain their flow on a more sustained basis by deputing them to Nepal to join Tribhuvan University as regular research associates, although their expenses would continue to be met by the Indian institutions sponsoring them. The same arrangement would apply to workers in the field of Classical Indology, for which there is much useful material in Nepal.

Foreign Students' Advisers

On the recommendation of the Advisory Committee of the Overseas Students set up in 1961 under the chairmanship of Dr. C. D. Deshmukh, the Indian Council for Cultural Affairs, in collaboration with universities, has appointed 17 Foreign Students' Advisers.

The Council has requested the universities to relieve the advisers, at least partially, of their teaching responsibilities so that they could give more time and attention to overseas students.

The scheme has received an encouraging response and it is expected that it will be implemented in most of the universities and other centres of learning where overseas students are studying.

Twelve local welfare committees for arranging special gatherings, informal discussions and introduction to Indian families have also been set up by the Council in collaboration with the universities concerned. It is hoped that these efforts will help in making the stay of overseas students in this country more pleasant and fruitful.

A meeting of the Foreign Students' Advisers in Indian universities was held on November 19 in New Delhi. The meeting was also attended by representatives of the Ministries of Education, External Affairs, Finance, Health and SR & CA.

American Professors Coming to India During 1963-64

During 1963-64, the U.S. Educational Foundation in India is arranging visits of about 43 American professors and scholars for lecturing and research in India. Of these 10 are specialists in English Language and Literature, six in Science and Technology, five in History, five in Religion and Philosophy, three each in Psychology and Education, two each in Geography and Medicine, and the rest are experts in various other branches of humanities.

Telugu for American Students

A batch of 10 American students—5 girls and 5 boys—have joined Osmania University for one year's study of Telugu and comparative village development under a scheme sponsored by the University of Wisconsin, U.S.A., with the active collaboration of Osmania University.

Campus News

Equipment for Nizamiah Observatory Arrives

The equipment for installing the 48-inch reflecting telescope—the largest instrument of its kind in South East Asia—has reached Osmania University's Nizamiah Observatory, Hyderabad. The telescope, supplied under the India Wheat Loan Educational Exchange Programme, will be installed at a site 35 miles away from Hyderabad. It will be particularly suitable for lunar and planetary studies, and the Nizamiah Observatory is already planning to participate in an international co-operative programme of stellar and galactic studies.

Dr. R.V. Karandikar, former Research Astrophysicist in the U.S. Air Force Laboratories, Cambridge, Massachusetts, U.S.A., has been appointed Head of the Department of Astronomy, Osmania University and Director of Nizamiah Observatory. He will be in charge of the installation of the 48" reflecting telescope and the research programmes to be carried out.

New Library Building at Chandigarh

The Prime Minister, Shri Jawaharlal Nehru, declared open the five-storey building of the Panjab University Library on October 23. The Library has about 200,000 volumes dealing with almost every branch of knowledge. It subscribes to about 1,500 scientific journals. The building is designed to accommodate five lakh books. It has four spacious reading rooms and 32 cubicles for research scholars and teachers.

South Asia Centre

A South Asia Studies Centre has been started under the auspices of the Department of Political Science, Rajasthan University, at which an intensive study of the governments and politics of the region will be undertaken.

Parapsychology Centre

A research centre in Parapsychology started functioning at Rajasthan



The President, Dr. Radhakrishnan, inaugurating the Golden Jubilee celebrations of the Sydenham College of Commerce.

University on October 1. The centre, which will work in close collaboration with the university's Department of Philosophy, has so far been financed by philanthropic donations only.

Agro-economic Centre

Allahabad University has accepted a proposal of the Union Government to establish an agro-economic research centre at the university for promoting and conducting researches in agro-economic problems of eastern districts of Uttar Pradesh.

Hindi as Sole Medium of Instruction

The Hindi Arts College, Hyderabad, affiliated to Osmania University, is the only college in Andhra Pradesh using Hindi as the medium of instruction. Courses offered are P.U.C. (Humanities) and B.A. The strength of the college is 70.

New Syllabus for P.U.C. English

Rajasthan University has introduced a new syllabus for General English for the P.U.C. examination to be held in 1964. The main object of the scheme is to improve students' power of understanding and correct expression of English. The scheme is on the lines proposed by the Central Institute of English, Hyderabad, and endorsed by the seminar of Heads of English Departments of the Indian Universities held at Srinagar in May 1961.

Sydenham College Jubilee

The President, Dr. Radhakrishnan, on October 2 inaugurated the Golden Jubilee celebrations of the Sydenham College of Commerce and Economics, Bombay, which completed 50 years of its useful existence on October 22, 1963. The weeklong celebrations were ambitiously planned under the stewardship of Principal K.T. Merchant and a target of Rs. 10 lakhs was set for the Golden Jubilee Fund.

The college has been a pioneer in the field of higher education in Commerce and has raised commerce training to the level of a liberal education. There are at present 1,300 students on the rolls of the college.

Examination Reform

Agra University has introduced a new scheme on an experimental basis to make students more study-minded by holding compulsory periodic tests and a mid-term examination. Only those students will be allowed to appear in the final examination of the university who secure at least 25 per cent marks in these tests.

Abolition of 3rd Class

Delhi University has decided to abolish the third division from 1964. No student who secures less than 40 per cent of the total marks in the school leaving examination will be admitted to the B.A. course.

COURSES OF STUDY

Agra University has decided to introduce *General English* as a compulsory subject for B. Sc. students, with minimum pass marks at 25 per cent.

Benaras Hindu University proposes to institute new diploma courses in (a) *Hindi* for foreign students and Indian students of non-Hindi areas and (b) *Ancient Indian History, Culture and Archaeology*.

The College of Indology of **Benaras Hindu University** has started a pilot scheme to teach eight Asian languages, namely *Burmese, Singhalese, Thai, Khmer (Cambodian), Indonesian, Old Javanese, Mongolian and Tibetan*, from the current term.

Delhi University has decided to institute three more degrees, namely, *Doctor of Literature, Doctor of Science and Doctor of Civil Law*.

The university plans to institute a two-year diploma course each in *Hindi and Urdu* for the benefit of foreign and non-Hindi and non-Urdu knowing students.

Karnatak University has introduced the following new courses/papers:

Diploma course in *Epigraphy* in the Department of Ancient Indian History & Culture.

Diploma in *French and German* in the School of Foreign Languages.

Paper in *American Literature*, with European Classics/Indo-Anglian Literature.

Paper in *American Government and Politics*.

Marathwada University has started post-graduate teaching leading to LL.M., M.A. (Urdu), M.Sc. (Agriculture), M.Ed., M.D. and M.S. degrees from the current academic year.

The university hopes to introduce the subject of *General Education* from the next academic year.

Osmania University has instituted Ph. D. degree in *Agriculture* with effect from 1963-64. Subjects of study include *Entomology, Plant Pathology, Chemistry and Agriculture Botany*.

The university has instituted a three-year diploma course in

Business Management. Commencing in November, the course is intended for junior executives who are graduates and are working in industry, business or government departments. Classes will be held four days a week for two hours in the evenings.

Panjab University has instituted Ph. D. degree in *Dairring*.

The university has also approved the institution of a post-graduate M.Sc. course in *Rotodynamic Machines* at the Panjab Engineering College, Chandigarh.

A diploma course in *Cartography* has been planned and the syllabus for the examination to be held in 1964 has been drawn up.

The duration of the LL.B. degree course for whole-time students at the university's Law College has been reduced to two years with effect from the admissions of 1963.

The university has decided to merge the B.T. and B.Ed. courses and to award the degree of B.Ed. for the teacher-training course.

Post-graduate training in the case of Army medical personnel performed in military hospitals only shall be considered by the university equivalent to honoursmanship.

Panjab University has started nine-month certificate courses in *Theory and Chinese languages*.

Rabindra Bharati has set up two faculties, namely the *Faculty of Arts* and the *Faculty of Fine Arts*, which includes *Dance, Drama and Music*. The following courses of study have been introduced:

(i) Three-year degree course, with provision for Honours in *English, Bengali, Sanskrit, History, Philosophy, Dance, Drama and Music*.

(ii) Three-year senior diploma course in *Dance, Drama and Music*.

(iii) Two-year junior diploma course in *Dance and Music*.

(iv) Diploma course in *Tyagore Literature*.

(v) Course on cultural subjects for General Education to which members of the public are also admitted.

Rajasthan University has granted provisional permission to the S.M.S. Medical College, Jaipur, to start a one-year post-graduate diploma course in *Anaesthesiology* with effect from October 1963.

S.N.D.T. Women's University has instituted Ph. D. degree in *Gujarati and Marathi* (language and literature) from June this year.

A two-year M.Sc. course in *Child Development* has been recently introduced at the College of Home Science of the university.



Kurukshetra University contingent to the 8th Inter-University Youth Festival with Prime Minister Nehru who was at home to the participants.

Scheme to Institute National Fellowships

A scheme to institute "National Fellowships" as a supplement to the National Professorships created by the Ministry of SR & CA is under the active consideration of the University Grants Commission. The new scheme aims at improving the standards of teaching and research in Indian universities by providing for a body of independent scholars, freed from financial worry, devoting the mature years of their life to higher scholarship. To start with 20 such Fellowships may be created.

The National Professorships have been awarded mainly to eminent scientists and the National Professors are not attached to any particular institution. There are at present six such National Professors: Sir C. V. Raman (Physics); Prof. Satyan Bose (Physics); Dr. Radhu Binode Pal (Jurisprudence); Dr. B. V. Kane (Indology); Dr. D. N. Wadia (Geology); and Dr. V. R. Khanolkar (Medicine).

The proposed National Fellowships, on the other hand, will be awarded to outstanding scholars for independent and original work in History, Economics, Indology and Philosophy. Again, unlike the National Professors, the National Fellows may be attached to one or more universities of their region so that they maintain close contact with academic developments.

C.S.I.R. Grants for Research

The total grant made by CSIR during 1962-63 to educational and research institutions for undertaking research in specific schemes exceeded Rs. 45 lakhs. Forty colleges and research departments of 27 universities, besides 40 other research institutions, were recipients of the grants.

Calcutta University received the highest amount (Rs. 3.95 lakhs) followed by Delhi University (Rs. 1.58 lakhs), Indian Institute of Science, Bangalore (Rs. 1.47 lakhs) and Banaras Hindu University (Rs. 1.31 lakhs). Shri Ram Institute for Industrial Research, Delhi, received the highest amount among Industrial research institutes in the country (Rs. 2.55 lakhs).

Grants & Awards

Scholarship Scheme for Post-graduate Studies

A new scholarship scheme under which university students would be encouraged to pursue their post-graduate studies at university centres most suited to their requirements is under consideration of UGC. The scheme which is expected to be launched from the next academic year, would help in bringing together best students and best teachers to the mutual advantage of both and at the same time promoting national integration.

Under the scheme it is proposed to institute about 100 scholarships each of the value of Rs. 150 p.m. for a period of two years. The scholarships may be awarded on an all-India basis to the best available candidates on the recommendations of a selection committee.

Honorarium to Retired Teachers

The university Grants Commission has decided to enhance the honorarium admissible to retired teachers under its scheme for utilisation of services of veteran scholars, from Rs. 4,000 to Rs. 6,000 with effect from the next academic year.

Churchill College Studentships

Churchill College, Cambridge, invites applications from men graduates for four research studentships leading to the Ph.D. of the University of Cambridge. The studentships include one College Research Studentship; one Gulbenkian Studentship; one Central Electricity Generating Board Studentship in natural sciences, mechanical sciences, or Mathematics; and one Pfizer Studentship in Chemistry, Chemical Engineering or one of the Biological sciences. These studentships will normally be tenable for three years and their value will be between £100 to £500 a year. Applications are to be submitted by April 1964 to the Tutor for Advanced Studies, Churchill College, Cambridge. Selection will be made in May 1964 and the courses will commence in October 1964.

Indian Scholarships for Foreign Students

To enable selected nationals of African, Asian and some Commonwealth countries to prosecute post-matric studies in India, the Government of India has decided to continue during 1964-65 the award of 70 scholarships.

Deserving foreign students who are already studying in India at their own expense may also apply for these scholarships.

The monthly rate of scholarship is Rs. 250. In addition, tuition, examination and all other compulsory fees will be paid by the Government of India. Scholars also receive book allowance within the ceiling of Rs. 200 per year, actual expenses on medical treatment, travelling expenses for approved study tours as well as for summer camps. The passage expenses to and from India are to be met by the scholars.

Scholarships for Nagaland

The Union Ministry of Education has announced 20 national scholarships for Nagaland for the academic year 1964-65. Sixteen scholarships will be for post-matric, three for post-intermediate and one for post-graduate studies.

Commonwealth Scholarships

The Commonwealth Scholarship and Fellowship Plan is making satisfactory progress in reaching its target of 1,000 scholarships and fellowships, according to the third annual report published recently by the Commonwealth Education Liaison Committee in London. The number of scholars holding awards under the Plan stands this year at 820 as against 680 last year.

It appears from the report that some of the countries which have instituted awards are now near to filling their quota of awards but have had difficulty in reaching their national targets owing to withdrawals too late for replacement. However, some other countries have found difficulty in attracting candidates for their awards particularly from the more developed Commonwealth countries.

World Orientalists Meeting

Over 1,000 scholars, 50 per cent of them from foreign countries, are expected to attend the 26th session of the International Congress of Orientalists to be held in New Delhi from January 4 to 10. This is perhaps the first time that the Congress, which first met in Paris 90 years ago, is holding its session in Asia.

Elaborate arrangements have been made for this purpose by the organising committee of the Congress with Prof. Humayun Kabir as its chairman. According to the programme prepared by the committee, the Congress will be divided into 10 main sections comprising Egyptology, Semitic Studies, Hittite and Caucasian Studies, Altaic Studies including Turcology, Iranian Studies, Indology, South East Asian Studies, East Asian Studies, Islamic Studies, and African Studies. The section on Indology has been further divided into five sub-sections, namely Vedic Studies, Classical Studies, Religion and Philosophy, History and Culture, and Modern Indian Languages and Linguistics. Each one of these 14 sections and sub-sections will have a foreign scholar as its chairman and an Indian as its secretary.

Symposia

Apart from the plenary and sectional meetings, the organising committee is arranging two symposia - one on "Changes in Muslim Personal Law" and another on "The Role of Oriental Studies in the Humanities". An exhibition of about 150 rare manuscripts and another of books on Oriental Studies are also planned.

Conference on Spectroscopy

A conference on Spectroscopy and allied subjects was organised under the auspices of the Physical Research Committee of CSIR at the Department of Physics and Spectroscopy, College of Sciences, Banaras Hindu University, from November 4 to 6. About 30 scientists from various universities participated in the deliberations.

Mathematical Science Symposium

The Institute of Mathematical Sciences, Madras, has decided to hold its second annual symposium on Elementary Particles in January 1964. Professor L. Rosenfeld of Denmark, who is the second Niels Bohr Visiting Professor at the Institute, will preside over the symposium, and Professor McCrea Hazlett, Vice-President of Rochester University (U.S.A.), is expected to be the chief guest.

Among the other visiting professors and members who will participate in the symposium are: Professor R. Magedon, CERN; Professor E.C.G. Sudarshan, University of Rochester (U.S.A.); Professor J.C. Ward, Hughes Aircraft Co. (U.S.A.); Professor B. Zumino, New York University; Dr. M. Jacob (France); Dr. Hugh DeWitt, Lawrence Radiation Laboratory, California; Dr. J. Lukierski, Courant Institute of Mathematical Sciences, New York; and Dr. L. O'Riordan, Institute for Advanced Study, Dublin (Ireland).

Problems in Geophysics to be Discussed

A symposium on problems in Geophysics relating to the crust of the earth (under the auspices of the Geophysics Research Board) will be held in January 1964 at the National Geophysical Research Institute, Hyderabad.

The scope of the symposium will be limited to problems in Geodesy, Seismology, Oceanography, geophysical exploration, Geochronology and physical properties of rocks.

● A symposium on "Structure, Biosynthesis and Function of Nucleic Acids" will be held at the Regional Research Laboratory, Hyderabad, in the middle of January 1964. About 50 invitees from India and abroad are expected to attend the symposium.

● A symposium on Fluidization under the auspices of the Chemical Research Committee of CSIR will be held at the Indian Institute of Technology, Kharagpur, in the first week of January 1964.

Seminars on Biochemistry

The Department of Biochemistry of the All-India Institute of Medical Sciences, New Delhi, is arranging three seminars and a workshop from January 2 to 12. The programme is open to teachers and research scholars from other medical colleges, universities and research institutions. Professor R. Monier of the Institut de Chimie Biologique, Marseille, will be a guest scientist on the occasion.

The seminars will deal with "RNA and the control of cellular growth and functions" (January 2); "Control of stable RNA synthesis in *E. Coli*." (January 3, 4); and "Ribosome structure and function in *E. Coli*." (January 6, 7). The technical workshop will be held from January 2 to 12.

Seminars on Shakespeare

The British Council is organising seminars in Bombay and Delhi on Shakespeare to mark the quarter-centenary of the playwright's birth.

The Bombay seminar, from December 10 to 21, will serve the universities in Western and Southern India, while the Delhi seminar, from December 31 to January 10, will serve the universities in Northern and Eastern India.

Three distinguished Shakespeare scholars from Britain will participate in the seminars. They are Prof. Geoffrey Bullough, Prof. of English Language and Literature at King's College, London; Professor John F. Danby, Professor of English at the University College of North Wales, Bangor; and Mr L. A. Shapiro, Senior Lecturer in English at Birmingham University.

Seminar on General Education

A four-day seminar on General Education was organised by SNDT Women's University Bombay, from October 11 to 14. About 50 delegates from various institutions of the university participated in the discussions which covered problems like curriculum, methods and preparation of teaching material connected with General Education. The seminar was presided over by Dr. Hans Simons, Consultant on General Education, UGC.

The question of administration's role in education is exercising the mind of many on educationists today. It also forms one of the subjects for the seminars organised at Varanasi on the occasion of the ninth quinquennial conference of the Inter-University Board of India. In the following articles Vice-Chancellors of two Indian universities highlight different aspects of the problem. In a sense, the two articles are supplementary to each other.

—Editor

UNIVERSITY ADMINISTRATION

Dr. H. J. Taylor, Vice-Chancellor,
Gauhati University

THE first thing to say about administration is that it is a means to an end not an end in itself. In a university, education is the primary activity and administration is at most a necessary auxiliary. But those who are engaged in administration tend to see it as something which exists in its own right, which must continually grow and expand. Thus we find administration everywhere proliferating and becoming increasingly complex in the manner so admirably illustrated by "Parkinson's Law", a work which should be compulsory reading for all university administrators.

In some of our larger universities administration has become so dominant that it hampers the main purpose of education. We must cease to think of a university as a vast administrative machine within which a few educational activities are permitted. A university is primarily a community of thinkers, scholars, teachers and lecturers and there is no reason why it should resemble a machine or a business organisation. The growth of administration has often been at the expense of scholarship research. As the late Sir J.J. Thompson once remarked at a cavendish dinner, "nowadays all the people who can do research are wasting their time administering others who never will be able to do it". It is a sombre fact that many of the best minds in the universities are occupied with unprofitable detail and prevented from making their proper contribution to scholarship.

'Pseudo-democracy'

Administration, as an auxiliary activity, should always be reduced to the necessary minimum. How much is necessary? The question is not easy to answer, but experience suggests that much less is necessary than we commonly suppose. Many established procedures could be greatly simplified, and often would simplify themselves if we could free our minds from certain ingrained prejudices. What we may call "pseudo-democracy" is one of these. Most of us support the democratic ideals, which means, broadly speaking, that government should be based on the consent of those who are governed. But it is questionable whether even the basic principles can be transferred to the academic world. Whether the income tax should go up can be decided by voting, but whether the accepted value of the velocity of light should go up cannot be decided by voting. Nor is there any democratic way of deciding whether Shakespeare's plays were written by Bacon. Even in the ordinary conduct of colleges and

universities we do not admit that the students should decide what is to be done, although they form an overwhelming majority of the membership.

There is of course a place for some elements of democracy in academic affairs, but we should not try to translate, point by point, the procedure of political government into the world of the university. But this is very often done. The Senate is regarded as the equivalent of the Assembly, the Syndicate is the Cabinet, the Vice-Chancellor is the Prime Minister, and the fact that the Chancellor is usually the Head of the State lends an air of verisimilitude to the whole analogy! At best the analogy is very imperfect, at worst it is extremely misleading. It gives rise to the idea, for example, that Senate proceedings should be recorded verbatim and placed on record, like parliamentary proceedings. This alone consumes an undue amount of time, energy and money, which would be better devoted to educational matters. And those concerned with education know how frustrating is the influx of party politics and electioneering into university affairs.

Curbs on Colleges

The universities have always opposed control by the government on the ground that freedom is essential in academic matters. But the universities often deny this same freedom to the colleges, which find themselves enmeshed in the administrative network of the university. Education in any true sense requires freedom, but administrative convenience requires uniformity. The imposition of uniformity often destroys the freedom to educate. This may be illustrated by considering the problem of attendance.

All universities require a minimum attendance. in one form or another. In Cambridge attendance is counted by nights, and the work is done by the hall porter. In some of our universities attendance is counted by days, and the work is done by the Principal who maintains whatever registers he considers necessary. But in others attendance is counted by lectures, and in one of the larger universities at least fifty million P's and A's are recorded in class registers each year. These must all be counted up, separately for every student and for every subject, and converted into percentages, usually by long arithmetic without even the help of a slide rule. They are then entered on fifty thousand forms which must be signed by the

Principals, often on both sides of the paper. In some places the system is completely vitiated from the start by a highly developed system of "proxy" which ensures that in large colleges the record bears little or no resemblance to the actual attendance. The total expenditure of time and energy on this unprofitable task is fantastic.

This is a classic example of the way in which unintelligent administrative procedures can hamper education. If the thing must be done at all, can it not be done without this waste of time and energy? Why it must be done at all? Tradition and prejudice apart, is there any reason why the number of lectures should be standardised? Lectures are not of equal value. One lecture by a man of genius is worth a hundred by nonentities. Suppose an imaginative Principal, with some insight into the meaning of education, gets the idea that the library should be the power-house rather than the lecture room and gets his students to use their minds and investigate things for themselves. Why should he be forbidden to work this out in his college? The dead hand of administration must not be allowed to frustrate the development of education.

Colleges should be given as much freedom as possible. This means freedom to choose their students and to choose their staff, subject only to some basic qualifications. It includes freedom to re-organise the time-table, to experiment with new methods of study and teaching, to introduce new ideas. Colleges should then be judged on the time-honoured principle that the proof of the pudding is in the eating. Colleges which can produce men and women of character and ability, able to take their place and hold their own in the world, should be left alone to continue the good work. Other colleges should be inspected to find out what is wrong.

This may be thought very unrealistic, impossible under present conditions. It is by no means impossible, but it does mean finding some escape from the shackles of the administrative machine. We must remember that present methods do not produce results; the failure rates in our examinations are amongst the highest in the world. Of those who enter the portals of the university only a very small proportion—it has been put as low as ten per cent—get through without a breakdown. When we contemplate the great waste of human material this represents, it is surely time we began to exercise some imagination.

Standardisation

Standardisation is the daughter of administrative convenience. It is excellent in the factory, but disastrous in the university. If you are making pipes, or screws, or motor cars, it is necessary that the products shall be precisely alike. In a university it is fatal if the products are precisely alike. Boys and girls, men and women, are individuals, with different backgrounds, outlooks, interests and gifts. Any developed system of education must treat them as individuals, and not require that everyone be steam-rollered into the same pattern.

Standardisation has gone too far. In a vast university a hundred colleges are required to operate

in precisely the same way, under the same rules, governed by the same constitution, their students using the same syllabus, reading the same textbooks, paying the same fees, attending the same number of lectures—and, finally, failing at the same examinations. It is not suggested, of course, that no rules are necessary; nor that in certain matters a measure of uniformity is not desirable. But the process has been allowed to go too far, and has been responsible for a conspicuous decline in the quality of education.

Redundant Documents

When unnecessary administration has been removed, what remains should be streamlined so that it runs smoothly and easily. At present it is like a rusty and outmoded machine, cumbersome and inefficient. This may be illustrated by the following example:

When a student first joins the university he fills in a registration form with all necessary particulars. If this information were properly registered in the university it would never be necessary to repeat it. But we require the student to repeat the information on a new form every time he appears for an examination or has any other dealings with the university. The number of forms arriving each year in the office of one of the larger universities must be at least a lakh. They must all be sorted, and the information extracted in an enormous cost of time and effort, and with multiple possibilities of error.

A hundred thousand pieces of paper will clog any machinery. In Gauhati we have decided that most of them are redundant documents. They serve no purpose, for all the information they contain ought to be on record. Preparing them wastes the time of the Principal and office staffs of the colleges, and the task of dealing with them is so formidable that the university must get them several months ahead of the examination. Examination forms have, therefore, been abolished. Principals send a single list of the students appearing certified by one signature instead of several hundred. The university has to deal with a few hundred sheets of paper instead of many thousand, the work is done more easily and quickly, and there are fewer chances of error. This is a good example of the way in which outmoded procedures can be simplified. In Gauhati we are now looking around for other things to abolish or simplify, and no doubt we shall find many.

The standard of education would rise if administration could be improved, and it may be useful to summarise the main requirements as follows:

1. Administration should be recognised as a means, not an end.
2. The political analogy should be abandoned.
3. Administration must not be allowed to hamper academic freedom.
4. Cumbersome methods should be revised, superfluous paper and red-tape eliminated, and the procedure streamlined.

There is no reason why the improvement should not be made. All we need is a little courage and more than a little imagination.

SOME ASPECTS OF UNIVERSITY ADMINISTRATION

Dr. Suraj Bhan, Vice-Chancellor,
Kurukshetra University

MORE than thirty years ago, as I was discussing my terminal essay with my tutor, Dr. P. Gurrey of the University of London Institute of Education, he happened to ask me which part of India I hailed from and which institution I represented. I was then Principal of the famous D.A.V. High School, Lahore, the biggest and easily one of the best schools of undivided Punjab, and had been deputed by my Society for further studies in the United Kingdom. I told my tutor that I hailed from Punjab and was head of the biggest school of the province. As was natural, he asked me the number of students in the school. It was nearly 5,000 and I told him so. He stood aghast and exclaimed: "What! Five thousand pupils! By God, we consider Eton a monstrosity even with 1,000, and you have as many as 5,000 children! I would suggest, Mr. Suraj Bhan, that you had better take a course in shorthand and typewriting rather than one in Education. All the time you must be busy with facts and figures rather than flesh and blood."

I did not choose to oblige him. But I have always remembered his significant remark. It bespeaks the distrust of the educational administrator as compared to the teacher and goes to belittle managerial functions in an educational organisation.

There is a curious impression among teachers at all levels that anyone who can teach can also administer whenever called upon to do so. The average teacher feels that there is unnecessary emphasis on administration. These beliefs among teachers in general and among others, too, who deal with things educational, have had far-reaching consequences.

Growing Specialisation

As a result of growing specialisation in all fields of life, consequent on advancement of technology and science, the importance of administration has grown tremendously. Collective enterprises are growing and large organisations are becoming the order of the day in all domains of life. These collective enterprises and large organisations can be fruitful only if they are directed wisely. If, therefore, teaching and research have to be effective on a large scale, there must be methods about it.

The need for developing educational administration as a separate discipline has seldom been felt in the past, and it is only recently that separate courses in the subject or separate institutions for training educational administrators have been thought of, particularly in the U.S.A. Hitherto, just as it was believed that mastery of a number of subjects would make great public administrators, it was also believed in equal measure that anyone who was a teacher could any time be an educational administrator.

Adverting to the remark of my tutor with which I began, I may say that in some cases educational

administration may prove to be the bane of education in the sense that a person keen on teaching may be pushed into an administrative job where his teaching talent may decay by disuse. Similarly, a person with a pronounced aptitude for research may be forced into a job which subjects him to intellectual suicide. But in the present scheme of things, there is no escape from educational administration, which if properly motivated and organised should enrich the tasks of education.

Educational administration is a vast field, and therefore it should be more fruitful to pin-point certain directions of improvement in educational administration towards a more effective achievement of our educational goals. It is my feeling that scant or inadequate attention to these is responsible for so many of our educational ills today.

Educational Leadership

The growth of democracy and the recent growth of "over-government" may be contradictory, but they are very much with us. Whether this is due to the slow abdication of powers and functions by individuals or the growing craze for more and more power among those who have enjoyed the taste of it may be a moot point. What is important to remember is that power is used differently by persons with different concepts of leadership. The kind and quality of leadership provided in educational administration is particularly important in the democratic society in which we live, because education is so basic to the satisfactory functioning of that society. The educational leader of the future should be a person who has faith in education, wide sympathy for the student community, capacity to get the most out of his colleagues, requisite scholarship and integrity, an infectious dynamism, and a keen imagination and intellectual curiosity that continuously challenges him to seek solutions to knotty problems of education in a rapidly changing civilization. He should have and practise a philosophy of education that is consistent with the ideals of Indian democracy. He should be able to help people, identify the emerging issues and develop procedures to bring about their solution.

Another aspect of administration which has not received adequate attention is its ethics. There is no doubt that the teachers constitute the most vital element in any educational organisation and it is they who, in the ultimate analysis, make or mar the good name of an educational organisation. As an educational desideratum student-teacher relationship may be all right. But if the teacher is not worth his salt, would his relationship with his students prove fruitful at all? Education may be the noblest of professions, but we do not become the noblest of men by merely joining it. Very few of us have bothered to go into

the ethics of educational administration since introspection and self-analysis are so irksome and damaging to self-esteem. It is conveniently believed that the administration of an institution for purposes of educating the young cannot but be sound ethically. I wish it were wholly true, but it is not. The reports of so many of our institutions—happily not many—conceal as much as they reveal. A probe into our standards of administration seems to be as desirable as into the standards of teaching and research, for a lowering of administrative standards has a subtle way of affecting the quality of educational institutions.

And lastly, I wish to lay emphasis on a desideratum which in actual practice is often neglected. All educational administration must be largely student-centred. It is this "flesh and blood" to which I referred at the beginning which is often lost in a sea of facts, figures and files. Tagore in his indictment of present-day education has said that all these years we have tried to adorn the cage, but the parrot in it has been allowed to starve. The great poet's warning, I must say, is not only very appropriate but very aptly put.

The definition of a college in the literature of American education is frequently given in the following epigram: "Mark Hopkins at one end of a log and a student at the other." James Abraham Garfield, 20th President of the U.S.A., was the author of the famous

definition. Speaking to alumni of William's College, New York University, at a banquet in 1872, he said:

"Give me a log hut with only a simple bench, Mark Hopkins at one end and I at the other, and you may have all the buildings, apparatus and libraries without him... So long as William's College can offer salaries which will command and retain the very best teaching talent of the country, she will offer a far greater attraction to thoughtful and ambitious students than any splendour of her architecture and richness of her cabinets and libraries... It is my conviction that the chief efforts made on behalf of the college should be directed not so much to halls and buildings as to increased endowments for paying professors and making tuition as nearly free as possible and for putting the cost of living within the reach of students whose means are most slender... I believe then that the two great supports of the college are *cheap bread and costly brains*."

Let everyone interested in the administration of our colleges and universities remember Mark Hopkins, the great teacher of America, at one end of the log and James Garfield, the great student who rose from the log cabin to the White House, at the other, and be sure that he cannot be wrong in his thinking and in his planning for the education of young students of this country entrusted to his care.

NEW UNIVERSITIES

The Rajasthan Agricultural University has been reconstituted as a multi-faculty university and has been renamed as Udaipur University. Under the amended Act, the university will provide facilities for higher education and research in all faculties including Technology, while maintaining its agricultural bias.

Indore, Gwalior and Raipur Universities would start functioning from the next academic year, according to a recent statement of the Chief Minister of Madhya Pradesh.

Shri M. C. Chagla said in the Rajya Sabha on December 12 that a decision with regard to the setting up of a second university in Delhi would be taken without much delay. The need for a second university had been felt because Delhi University had now 28,000 students and the numbers were still growing.

UGC has agreed in principle to the establishment of universities at Dibrugarh, Gwalior, Indore, Kanpur, Madurai, Meerut and Raipur. However, the establishment of

these universities is primarily the concern of the State Governments.

UGC has appointed a six-member committee under the chairmanship of Professor A.R. Wadia, M.P., and Dr. P.J. Philip as its Secretary, to study and report on measures to be taken for the development of higher education and the question of setting up a university for Nagaland, NEFA, Manipur and the hill areas of Assam. The committee is expected to submit its report by the end of March 1964.

The question of setting up a university in Goa is believed to be under the consideration of the Government of India. A study team recently visited Goa in this connection.

The Government of West Bengal plans to establish a Vivekananda University during this year to mark the birth centenary of the great saint of modern India. The university is to be set up to perpetuate the memory of Swami

Vivekananda and "to give a concrete shape to his ideas and ideals of man-making and character-building education". A draft Bill for the establishment of the university has been forwarded in the Central Government for approval.

The Union Ministry of Education is considering a representation received from the Mysore Government regarding the opening of a university at Bangalore.

A rural university is to be set up at Hyderabad at an estimated cost of Rs. 1.25 crores. The Central Government has sanctioned a sum of Rs. 25 lakhs for this purpose.

There is a move to recognise the Indian School of Mines, Dhanbad, as an institution "deemed to be a university" under Section 3 of the UGC Act. Steps are being taken to improve the organisation and courses of study at the School. Already there are seven institutions in the country which are deemed to be universities under the UGC Act.

Statement Showing (a) Number of Candidates Appeared (b) Number of Examinations at 36

Note : Figures in respect of each examination

Name of University	P.U.C. Arts & Com.	P.U.C. Science	B.A.	B.Sc.	B. Com.	M.A.	M. Sc.	M. Com.	B. Ed.	M. Ed.
1. Aligarh	195 108 8	419 189 60	160 138 10	210 154 16	25 22 2	417 410 38	100 98 17	33 33 5	167 158 7	21 19 —
2. Allahabad	N.A.	N.A.	1,844 1,232 21	633 570 36	932 190 1	676 630 27	200 161 34	85 82 4	N.A.	28 25 1
3. Andhra	84,906 6,364 144		1,044 389 27	2,382 1,051 376	570 415 34	163 163 44	154 145 114	—	613 473 —	9 3 —
4. Annamalai	245 109 14	211 52 14	112 56 4	160 98 23	85 30 —	53 45 11	117 95 35	14 9 —	104 84 —	—
5. Banaras	98 47 4	374 206 57	1,159 606 7	281 199 27	237 143 4	1,181 1,045 22	164 160 81	23 22 1	N.A.	12 12 1
6. Bihar	9,228 3,740 77	4,291 1,932 130	5,172 2,489 10	1,300 373 9	423 255 8	—	—	—	—	—
7. Bombay	—	—	3,248 2,781 28	3,762 2,791 97	737 477 5	605 419 15	377 223 15	194 108 1	273 269 51	19 14 —
8. Gauhati	10,110 3,374 70	3,235 1,726 183	N.A.	763 397 4	N.A.	N.A.	N.A.	N.A.	—	—
9. Gorakhpur	—	—	3,555 N.A. 3	786 N.A. 37	368 N.A. —	637 N.A. 16	105 N.A. 14	68 N.A. 14	1,340 N.A. 2	21 N.A. 3
10. Gujarat	11,798 7,860 66	7,217 5,224 1,489	4,560 3,590 22	2,968 2,368 91	1,528 767 2	618 491 3	286 193 24	143 94 —	497 475 47	20 19 —
11. Indira Kala Sangrahalaya	—	—	185 157 16 (Music)	—	—	39 37 1 (Music)	—	—	—	—
12. Jabalpur	—	—	11,941 544 3	476 278 20	420 267 1	342 304 21	100 95 41	107 96 4	187 186 28	18 14 —
13. Jodhpur	526 347 3	444 157 24	355 125 —	108 41 1	85 51 —	139 112 6	33 29 3	26 17 2	163 160 —	—
14. Karnatak	3,891 1,944 16	3,163 1,621 290	589 425 6	300 277 25	373 162 3	221 170 14	165 141 37	54 39 2	240 232 9	34 26 —
15. Kerala	23,573 11,526 632	1,636 1,190 31	5,292 3,432 545	698 426 7	395 342 36	276 258 84	55 48 1	2,204 1,978 —	21 19 5	
16. Kurukshetra	148 104 6	99 69 5	—	—	—	29 22 7	24 24 8	—	—	—
17. Lucknow	—	—	2,394 1,262 23	1,052 434 33	406 301 4	647 617 —	188 177 46	85 84 10	174 157 —	26 15 —
18. M.S. Baroda	1,312 741 52	654 543 187	319 251 24	136 83 17	414 230 12	96 77 7	121 104 29	32 24 1	107 104 13	19 19 1

Successful and (c) Number Awarded 1st Class in Various 1963 Annual Indian Universities

given in the order of (a), (b) and (c) above.

L. B.	LL. M.	B. Sc. (Ag.)	M. Sc. (Ag.)	M.B.B.S./B. Sc. (Med)	M.D./M.S./M. Sc. (Med)	B.V. Sc. & A.H.	M.V. Sc. & A.H.	B.E./B.Sc. (Engg.)	M.E./M.Sc. (Engg.)	B. Tech./B.Sc. Tech.	M. Tech./M.Sc. Tech.
93 70 1	3 2 —	—	—	—	—	—	—	117 95 44	—	—	—
312 186 2	1 1 —	83 88 10	16 16 —	—	—	—	—	—	—	—	11 7 4
82 59 —	7 3 —	147 125 7	—	160 95 —	199 56 —	—	—	278 242 170	—	34 14 26	73 59 37
—	—	35 25 1	5 5 3	—	—	—	—	161 158 97	N.A.	—	—
206 128 4	N.A.	70 70 4	31 30 22	—	—	—	—	251 247 74	10 10 9	88 84 11	—
88 74 —	—	82 81 5	—	100 79 —	—	—	—	73 48 8	—	—	—
893 560 10	68 26 2	—	—	184 123 1	151 58 2	41 33 —	30 25 7	209 139 46	6 4 —	211 145 47	—
44 12 —	—	74 41 —	—	92 55 —	—	N.A.	—	100 67 7	—	—	—
246 N.A. 6	—	890 N.A. 31	—	—	—	—	—	—	—	—	—
486 179 1	39 7 1	59 51 5	—	134 90 —	36 18 —	—	—	400 278 11	3 1 —	—	—
—	—	—	—	—	—	—	—	—	—	—	—
110 64 2	N.A.	80 58 8	33 32 21	54 28 —	N.A.	27 12 —	N.A.	278 217 56	N.A.	—	—
55 34 1	—	—	—	—	—	—	—	127 123 55	—	—	—
196 88 1	2 2 —	108 80 1	30 24 5	140 67 —	1 1 —	—	—	377 227 23	—	—	—
213 111 1	N.A.	49 51 6	N.A.	69 42 —	N.A.	47 26 4	—	401 374 111	21 21 10	—	—
—	—	—	—	—	—	—	—	—	—	—	—
693 601 58	13 8 —	—	—	260 146 —	189 83 —	—	—	—	—	—	—
112 81 11	—	—	—	46 33 —	12 5 —	—	—	365 306 113	5 4 2	—	—

Name of University	P.U.C. Arts & Com.	P.U.C. Science	B.A.	B.Sc.	B. Com.	M.A.	M. Sc.	M. Com.	B. Ed.	M. Ed.
19. Magadh	8,034 4,059 41	4,099 1,712 34	2,406 1,130 14	796 284 5	325 147 —	82 71 11	3 2 —	10 7 —	—	—
20. Marathwada	1,797 588 4	1,483 758 38	502 230 4	276 135 10	178 104 5	89 45 8	31 19 10	—	143 142 1	—
21. Nagpur	10,843 3,445 108	2,355 895 110	2,119 1,373 18	436 233 16	880 501 5	676 593 20	149 124 42	109 90 5	441 399 60	—
22. Orissa Agri.	—	—	—	—	—	—	—	—	—	—
23. Osmania	1,690 882 41	4,519 2,289 180	1,276 630 15	1,173 515 37	462 207 5	216 205 14	121 110 50	13 15 —	541 433 71	19 12 1
24. Patna	1,655 1,106 N.A.	760 476 N.A.	1,200 685 N.A.	268 92 N.A.	128 56 N.A.	1,083 920 N.A.	202 148 N.A.	83 62 N.A.	—	—
25. Poona	11,993 5,593 39	6,607 3,825 575	3,569 1,384 21	1,492 591 90	1,262 326 —	607 415 9	243 200 36	51 28 —	630 595 58	86 77 1
26. Panjab	21,511 9,131 640	—	N.A.	2,286 967 123	87 42 —	2,103 1,579 78	19 19 10	—	N.A.	N.A.
27. Panjabi	296 169 2	110 64 4	259 157 11	39 27 9	16 12 —	71 66 3	—	—	193 159 88	N.A.
28. Rajasthan	6,226 2,546 41	2,850 963 180	6,538 2,773 6	683 351 27	853 546 1	1,276 1,053 33	230 207 51	128 99 5	594 567 12	17 16 4
29. Roorkee	—	—	—	—	—	—	—	—	—	—
30. S.V. Vidyapeeth	799 541	1,235 860 196	149 149 9	123 96 12	146 141 4	60 45 5	60 53 11	15 13 —	102 102 5	9 8
31. Sri Venkateswara	3,779 1,287 121	—	484 205 1	776 210 31	80 44 1	124 107 22	83 79 32	—	270 255 2	—
32. S.N.D.T.	3,197 1,273 8	—	1,364 715 5	33 23 3	—	258 144 —	—	—	243 218 16	33 20 —
33. Udaipur	—	—	—	—	—	—	—	—	—	—
34. Utkal	2,782 1,913 43	2,779 1,745 184	1,453 951 11	655 469 32	214 134 —	—	—	—	351 340 —	—
35. Vikram	—	—	3,054 2,541 7	463 311 35	740 526 3	1,174 1,075 36	282 239 56	274 230 6	472 450 33	41 38 1
36. Visva Bharti	5 5 —	—	48 20 1	3 2 1	—	47 34 4	—	—	74 72 11	—
Total (Except for Gorakhpur)	173251 83790 6053	59189 27638 353	29223 16671 1737	11404 6522 104	13556 11144 484	3628 3003 859	1604 1200 38	8783 7958 448	432 358 15	—

LL. B.	LL. M.	B. Sc. (Ag.)	M. Sc. (Ag.)	M. B. B. S. ; B. Sc. (Med)	M. D. / M. S. / M. Sc. (Med)	B. V. Sc. & A. H.	M. V. Sc. & A. H.	B. E. / B. Sc. (Engg.)	M. E. / M. Sc. (Engg.)	B. Tech. B. Sc. Tech.	M. Tech. M. Sc. Tech.
121 89	—	—	—	—	—	83 64	—	—	—	—	—
50 32 2	—	33 24 2	—	25 12 —	—	—	—	23 23 7	—	—	—
134 28 1	3 3 —	200 153 16	45 44 26	105 72	107 73	34 18	—	88 66 25	—	26 24 11	—
—	—	117 107	—	—	—	40 26	—	—	—	—	—
315 126 3	24 16 —	69 52 —	14 14 10	112 78 —	—	67 28 —	—	174 132 64	3 3 3	31 30 8	—
113 80 N.A.	2 2 N.A.	—	—	152 82 N.A.	113 71 N.A.	—	—	142 122 N.A.	—	—	—
156 84 —	17 9 —	96 90 5	15 12 5	57 29 —	33 17 —	—	—	525 380 70	33 29 6	—	—
399 249 14	3 1 —	76 38 —	—	172 135 —	37 13 —	—	—	—	—	30 30 30	—
—	—	—	—	85 53 —	—	—	—	111 105 95	—	—	—
221 136 3	3 2 —	50 50 3	—	110 64 —	39 7 —	—	—	167 161 80	16 12 —	—	—
—	—	—	—	—	—	—	—	248 233	137 136 76	18 18 9	—
—	—	189 109 6	1 1 —	—	—	—	—	287 259 51	—	—	—
—	—	—	—	32 15 —	—	61 31 —	—	113 85 41	—	—	—
—	—	145 144 16	19 18 13	—	—	60 53 —	—	—	—	—	—
—	—	—	—	—	—	—	—	114 92 13	—	—	—
429 189 24	—	126 93 13	N.A.	300 154 —	99 20 —	45 23 —	N.A.	222 148 54	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
5421 3268 144	185 82 3	1638 1586 110	210 196 105	2389 1454 1	979 409 2	505 314 4	30 25 7	5291 4317 1318	224 220 106	438 365 142	84 66 41

Scientific Revolution Has Assigned New Role to Universities, Says Kothari

"Apart from the element of unpredictability injected by science in the march of events, the other two important characteristics of the Scientific Revolution are the rate of growth of science and the new role and significance of the universities," declared Dr. D.S. Kothari, Chairman, UGC, in his presidential address at the 30th session of the Indian Science Congress held at Delhi University from October 7 to 10.

Dr. Kothari said that the total achievement to date in science and technology was indeed remarkable, but even more striking was the rate or pace of progress. "So rapid is the pace of scientific progress that a scientific paper is often out of date by the time it is in print; a graduate is almost obsolescent on the day of his graduation; a weapon-system already obsolete by the time it is in production."

A consequence of the exponentially expanding science was that the time gap between basic discovery and its application was continually diminishing. Another important aspect of the situation was that an advanced country, if it so desired, could make a major contribution towards the rapid development of a newly developing country without sensibly affecting its own economy or rate of progress.

Varsities' Contribution

Dr. Kothari pointed out that whereas in the early days of the Scientific Revolution science had hardly any place in the universities (the reigning subjects being Theology, Grammar, Rhetoric and Astrology), in the modern world the universities made by far the largest contribution to fundamental science. This, he said, had given a new status and a new significance to the place and role of the universities in national economy.

He urged that everything possible should be done to strengthen the universities, specially at the post-graduate and research level; this should be a key point in the plan and pattern of develop-

ment of the country's resources in talent and facilities. In the context of the present meagre level of facilities, the layout on the universities should at least be doubled in five years.

In his inaugural address, Prime Minister Nehru called upon scientists to shun bureaucracy. He said in a creative and revolutionary field like science, age and seniority should not be given undue importance.

Spirit of Science

Earlier, in his welcome speech, Dr. C. D. Deshmukh, Vice-Chancellor, Delhi University, said that whilst no community could advance without an adequate supply of scientists and technologists of the required calibre, such a supply and such calibre could not be raised in a community which was not hospitable to the spirit of science and technology.

About 700 scientists from all over India and a dozen foreign delegates participated in the four-day session which included several symposia, popular lectures, joint discussions and sectional meetings.

Scientific Equipment from Abroad

Indian universities have been asked to indicate their requirements, including their affiliated colleges, in scientific equipment which might be met under the recent trade plans finalised between the Government of India and the Governments of the U.S.S.R. and Yugoslavia for the year 1964.

Under the trade plans, Russia is to supply laboratory testing machines, optical and control measuring apparatus, metal cutting instruments and abrasive grains worth Rs. 25 lakhs, and medical and veterinary instruments and equipment worth Rs. 15 lakhs. Yugoslavia will supply equipment for technical and educational laboratories worth Rs. 20 lakhs during the same year.

During the licensing period April-September 1963, the Government of India released foreign exchange worth Rs. 14.40 lakhs to various universities and affiliated colleges for the import of scientific equipment and books.

Atomic Energy Personnel for Universities

The Department of Atomic Energy, Trombay, is considering the possibility of loaning out some of the successful trainees of its Training School to universities for research and teaching work while keeping them on the Departments's pay rolls.

The Training School, which has been in existence for seven years now, provides one-year advanced training in Physics, Chemistry, Mechanical, Chemical, Electrical and Communication Engineering and Metallurgy. Although it is run primarily to meet the requirements of the Department of Atomic Energy, it is now in a position to turn out personnel of high calibre for meeting the needs of other scientific institutions such as the universities and the national laboratories. In the case of universities the Department is even prepared to consider placing them on their pay rolls while permitting them to take up research and teaching work at the universities.

Training Teachers for Engineering Colleges

The Regional Engineering College, Warangal, affiliated to Osmania University, has been selected by Unesco for a scheme of training teachers of other Regional Engineering Colleges in India. A grant of financial aid towards equipment is expected under the scheme. A foreign visiting professor will also be assigned to the college.

Unemployment Among Science Graduates

According to a survey of 60,000 General Science graduates, conducted by the National Register of CSIR on the basis of data of February 1961, 13% of the graduates appear to be wasted through unemployment and 42% through non-technical employment. The report points out that it should be possible to make better use of Science graduates in technical work where more qualified personnel are at present employed but are not really required.

● On the recommendation of the All-India Council for Technical Education, it has been decided to increase the admission capacity in Chemical Engineering courses at Annamalai, Andhra, Madras and Osmania Universities.

Study of Botany in Indian Universities

The recent report of the Review Committee on Botany, the third in the series from the Review Committees appointed by UGC on various science subjects, shows that there is considerable room for improvement in the teaching of Botany and that the systems of examination and admission need reconsideration.

The Botany Review Committee, which was appointed in March 1959, was headed by Dr. P. Maheshwari, Head of the Department of Botany, Delhi University, and Dr. B.D. Laroia acted as its member-secretary. The other members of the committee were: Dr. B.P. Pal (IARI), Rev. Fr. H. Sawapau (Botanical Survey of India); Prof. T.S. Sadasivan (Madras University); and Dr. Shri Rajan (Allahabad University). Prof. John N. Couch of the University of North Carolina (U.S.A.) was also associated with the work of the committee for some time during his visit to India under the India Wheat Loan Educational Exchange Programme.

More Professors Needed

After tracing the development of teaching and research in Botany at Indian universities and other institutions, the report gives a picture of the existing position of post-graduate teaching in the universities and affiliated colleges. It points out that there is not a single university in India which has more than one professor of Botany, although other sciences have two or more. Further, while there are only a few top-ranking botanists in the universities, the number of odd jobs and assignments needing their attention is "unbelievably large". The result is that these professors are not able to get some quiet time for their own study and for guiding research.

The committee feels that there should be a senior teacher for each of the following subjects: Plant Physiology; Microbiology and Plant Pathology; Systematic Botany; Morphology, Embryology and Anatomy of Phanerogams; Morphology, Embryology and Anatomy of Cryptogams; and Genetics. It also suggests that for the present it would be better to have a single strong Department of Botany than separate

departments or sub-departments of Physiology, Genetics, Microbiology, etc.

Teacher-Pupil Ratio

The report terms the present teacher-pupil ratio as "unsatisfactory" and recommends that in Botany Departments where microscopic work and individual attention are constantly needed the number of teachers should be increased so as to give a ratio of 1 : 8 in the practical classes at the Honours and M. Sc. level.

Referring to the scarcity of really bright students in the subject, the report states that this is due to the general impression that biological subjects offer fewer opportunities.

Problem of Equipment

The report also deals with the problem of unsatisfactory conditions of work and lack of proper equipment. A good botanical garden, a well-kept herbarium containing a complete collection of all groups of plants of the local flora, and a museum of botanical specimens are indispensable adjuncts to any Department of Botany imparting at M.Sc. level. However, these training are rarely to be seen in the colleges and sometimes not even in the universities.

It is recommended that more stringent conditions should be laid down before a college is permitted to open M.Sc. classes. At present, it is estimated, about 35 constituent or affiliated colleges are admitting students for post-graduate training in Botany and about 60% of the total number of Masters in Botany come from these colleges.

New Syllabus

The chief point the committee has made regarding the syllabus is that more time should be available

for field work and experimental Botany involving such fields as Physiology, Microbiology and Genetics. To make this possible a certain amount of reduction can be made in the morphological and descriptive aspects of the subject. The committee also recommends that there should be other combinations at the B.Sc. level beside the usual one of Chemistry, Botany and Zoology. There are many aspects of Botany for which Physics/Mathematics, Chemistry and Botany will form a more suitable combination and a better basis for admission to the M.Sc.

Recommendations have also been made for the establishment of centres of intensive research, creation of national professorships and training of in-service teachers. Among the other desired facilities, mention may be made of monetary assistance to research workers for the publication of their papers, for the improvement of Indian journals, for the establishment of a small workshop in every department, and for the setting up of hill laboratories and marine biological stations on a regional basis.

More Review Committees

The University Grants Commission, in collaboration with the Indian Council of Agricultural Research, has set up a six-member Agricultural Education Review Committee under the chairmanship of Dr. A.C. Joshi, Vice-Chancellor, Panjab University. The committee will undertake the qualitative and quantitative appraisal of the existing facilities for teaching and research at undergraduate and post-graduate levels and examine the extent to which research and extension could be integrated.

The Commission has also decided to refer the question of proper development of legal studies in Indian universities to a review committee.

So far UGC has published reports of the Review Committees on Mathematics, Biochemistry and Botany. The report of the Review Committee on Chemistry is going to be published shortly. The work relating to the Physics Review Committee will be taken up after the committee is reconstituted.

A.I.C.T.E. Meeting

(Contd. from page 1 Col. 2)

the quality of education and training was not of the correct type.

He stated that according to a survey carried out recently by the Planning Commission the overall wastage in engineering colleges and polytechnics was of the order of 25% and 50% respectively. Among the more important reasons for this were a serious shortage of teachers, faulty admission procedures, imperfect teaching methods, and an antiquated system of examinations.

Supply of Teachers

Surveying the problem of shortage of qualified teachers, Shri Chagla emphasised the need for establishing more technical teacher-training centres under the Technical Teachers Training Programme for engineering colleges. It was, however, at the polytechnic stage that we were faced with the greatest shortage of teachers. The Working Group for the Fourth Plan had recommended to the Central Government to proceed with the establishment of four Technical Teacher Training Institutes, one in each region of the country, to train teachers for polytechnics. A proposal to constitute a Central Pool of Technical Teachers was also under consideration of the Government.

Dealing with standards of post-graduate education, the Education Minister remarked: "Maintenance of high standards can never be the result of any administrative action on the part of the Government or a set of rules and regulations formulated for the purpose. It is, and will always be, the result of the urge, the effort and the initiative on the part of our professors for scholarship and excellence."

For the achievement of scholarship and excellence on the part of our professors, a certain amount of administrative and academic freedom was necessary. "If you could trust a teacher to teach your students, there is no reason why you should not trust him with what to teach and how to teach it. On the other hand, to make him teach ac-

FACILITIES FOR TECHNICAL EDUCATION

According to a survey of technical education facilities available in the country during 1962-63, there were 114 institutions conducting the first degree or equivalent courses, with a total intake of 17,669. The output during 1962-63 was 8,426. The subject-wise break-up of intake and output is given below :-

Subject	Intake	Output
Civil Engineering	5737	2543
Mechanical Engineering	4147	2345
Electrical Engineering	4068	1688
Telecommunication Engineering	450	250
Mining Engineering	341	198
Metallurgy	467	174
Chemical Engineering	1013	363
Textile Technology	255	174
Architecture	448	156
Aeronautical Engineering	10	7
Automobile Engineering	30	20
Pharmacy	221	127
Others	487	381
Total	17669	8426

cording to a syllabus dictated by an outside authority and to just prepare students for an external examination with which he cannot identify himself is surely no education. Nowhere in the world in any progressive country is there such a rigid system of education and examinations as we have in India today."

The Education Minister further gave an assurance that he would see that every talented Indian abroad found a suitable job in this country. He, however, expressed himself against putting any restrictions of foreign exchange for those who wished to go abroad for higher technical education.

Council's Decisions

The Council later supported the proposals regarding the expansion of admission capacity in engineering colleges and polytechnics, establishment of four regional Technical Teacher Training Institutes, and setting up of a Central Pool of Technical Teachers, referred to by the Union Minister in his presidential address.

The Council further suggested that more extensive provision should be made for part-time diploma courses and evening classes for persons working in industry, Government departments and other organisations. In accordance with the scheme formulated by the Council, the Central Government has already sanctioned 25 centres all over the country for part-time diploma courses for industrial workers. A scheme of part-time degree courses in Engineering was also commended by the Council.

Cheaper Textbooks

The Union Minister expressed his happiness that cheaper editions of standard textbooks were being brought out with subsidy provided by British and American Governments and said that these cheaper editions had gone a long way in helping Indian students. At the same time, he advised that all encouragement should be offered to Indian authors to write books for our students.

Free Education

During the general discussion that followed his address, Shri Chagla assured Shri Partap Singh Kairon, who pleaded for free technical education, that he would strive for making technical education free as far as possible. "Even if we cannot make it free, we should give a larger number of scholarships on the basis of merit and means."

Asia Foundation's Books Project

Under its Books for Asian Students project, the Asia Foundation has established certain procedures to ensure the smooth flow of up to 100,000 books a year to Indian universities.

The project, which is sustained by donations of materials by American organizations and individuals, aims at meeting the great need of Asian students and research workers for standard text and reference works. Recently the Foundation has also started to distribute large stocks of standard texts donated by American publishers as new editions are issued.

According to the procedures laid down for Indian universities, the Foundation will welcome any responsible persons to visit their warehouse in Delhi and select books for their university libraries. Although preference will be given to requests based on personal inspection of available stocks, the Foundation will also consider lists of subjects forwarded by those universities which do not send representatives. In addition, the Foundation will accept quarterly want lists of up to 250 specific titles from each university.

Over the past ten years the Foundation has distributed more than 50 lakh books and journals to Asian educational and research institutions.

Free Distribution of Tamil Books

The Bureau of Tamil Publications, Madras, plans to distribute free copies of its Tamil publications to those universities where Tamil Departments are functioning. The Bureau has been set up by the Madras Government for publishing in Tamil books on various subjects relating to science and humanities for university students and the general public.

History of Freedom Movement

The second volume of *The History of the Freedom Movement in India* is expected to be ready by the end of the current year. A total expenditure of Rs. 1,44,570 has so far been incurred on the writing of it.

Textbooks on Botany

The Ministry of Education has asked UGC to take up the preparation of standard textbooks on Botany for B.Sc. and post-graduate students. The Monographs Committee of CSIR had pointed out that most of the textbooks at present available were published in foreign countries and as such were not based on Indian flora and did not incorporate the results of research work done in this country on various aspects of Indian Botany.

The UGC Review Committee on Botany has already suggested a model syllabus for Indian universities.

'Book Fair' at Panjab University

Fresh ground was broken at the Panjab University Library when a "book fair" was organised on September 10 and 11, 1963. The system for acquisition of books thus far had been rather impersonal in the sense that the books had been recommended by the various Heads of Department on the basis of publishers' catalogues of lists passed on to them from time to time. But during the book fair, leading booksellers were invited to bring their choice selections of latest books and university teachers were invited to make on-the-spot selections.

Nearly 25,000 books were brought to the fair by the various publishers. The encouraging response of the visitors bids fair to make this system of book selection a regular feature.

Vikram University Brochure

Vikram University has brought a brochure containing a list of research scholars who have been awarded and who have registered for the Ph.D. and D.Litt. degrees of the university during 1959-63, alongwith full titles of their theses and names of their supervisors. The information has been arranged under subject headings.

Cheapest Complete 'Shakespeare'

To mark the celebrations in connection with the 400th anniversary of Shakespeare's birth, the British Government's advisory committee on the selection of low-priced books for overseas proposes to publish the cheapest complete works of Shakespeare. It will appear in January 1964 at 75s. 6d.

Education Ministry's Journal

The Union Education Ministry has recently brought out the first issue of the quarterly journal *Educational Facilities in India and Abroad*. The journal aims at providing students with information regarding the opportunities and problems in the field of higher studies in India and abroad.

Details regarding approved courses of studies training for which foreign exchange facilities are available are given in the form of an article. Particulars regarding some of the new courses of education introduced in Indian Universities from the academic year 1963-64 are also given in the journal.

A special section under the heading "You ask—We answer" is devoted to replies of questions bearing on higher educational facilities.

New Australian University Journal

The first issue of *The Australian University* a magazine issued with the support of the Vice-Chancellors' Committee was produced in July 1963. The journal will publicise Australian universities in Australia and overseas, and will publish essays on problems of overseas universities that would interest Australian readers, and examine educational developments relevant to universities. The editor is Dr. S.W. Cohen, Director of Advisory Services at the University of Sydney; and the Associate Editor is Mr. R.W.V. Elliott, Reader in English at the University of Adelaide. There will be three issues a year at 8s. 6d. each or 25s. 6d. a year.

Manuscriptology

A plea for including textual critical studies in the curricula of post-graduate students was made by the seminar on "Manuscriptology and Textual Criticism" at its concluding session on November 12 in New Delhi. The seminar also suggested that post-graduate students of social and natural sciences be attracted to the study of Sanskrit and to the editing of indological texts dealing especially with positive sciences. It also suggested the starting of a journal of Manuscriptology.

Inter-University Youth Festival

The picturesque Talkatora Gardens in New Delhi resounded with music, dance and the gay laughter of youth during the weeklong eighth Inter-University Youth Festival held from November 11 to 18, in which 700 boys and girls from nearly 30 Indian universities took part. The festival was due to be held last year, but was postponed in view of the trouble on our borders.

The presence at the inaugural function of three Soviet Cosmonauts, Valentina Tereshkova, her husband Andrian Nikolayev, and Valery Bykovsky lent an added element of buoyancy to the festival. The Prime Minister in his inaugural speech called upon the youth of the country to extricate themselves from mental rigidity and to inculcate the spirit of the changing world that is characterised by adventurous space travel and amazing scientific progress.

The festival provided an opportunity for the young men and women from different regions of the country to know each other better and appreciate the richness and variety of the cultural life of India. The programme included discussions, debates, group songs and dances, classical and light music, and an exhibition of paintings and creative works by students.

New Dimension

A new dimension was imparted to this year's festival by reserving November 15, the Dewali day, for sports and physical activity. In the morning all the students took part in a mass rally at the Northern Railway Stadium. After a march past they participated in a number of athletic events. In the afternoon there was an exhibition hockey match organised jointly by the Union Ministry of Education and the Inter-University Board of India in which outstanding hockey players from 11 universities took part.

All the cultural activities were directed towards creating a feeling of oneness among the students and the debates towards employing and testing their intellectual capacity.

The cultural programmes were always a big draw and the tickets sold out much in advance of the shows began. Many State Educa-



Group dance by Kerala University students at the 8th Inter-University Youth Festival

tion Ministers and Vice-Chancellors who were present in New Delhi for their conference availed themselves of the opportunity of visiting the festival. At the concluding function, which was attended by over 3,000 persons, students gave their best in dance and music that the festival had to offer.

Bombay University won the first prize for its excellent performance on and off the stage. Calcutta and Agra Universities were awarded the second and third prizes respectively.

N.C.C. Anniversary

The 15th anniversary of the National Cadet Corps was observed throughout the country on October 20 to coincide with the National Solidarity Day. The President, Dr. Radhakrishnan, said in his message to NCC:

"The primary object of membership of the Corps is to be available for the defence of the country in times of need. I am happy to find that so many of the younger generation in the country are training themselves actively to be able to answer any call in the service of the country.

"I have no doubt that the lessons of discipline and comradeship which the young people learn as members of the National Cadet Corps will make them better fitted for a full and free life."

The Defence Minister, Shri Y. B. Chavan, said in his message:

"Just as the National Solidarity Day has come to stay as an important feature of our national life, the National Cadet Corps has also become a permanent feature of the life of our youth in schools and colleges. Celebrating the NCC day on the same day as National Solidarity Day gives now a definite form, content and objective to the training of our youth in the NCC."

Maj-Gen. Virendra Singh, NCC Director-General, in an "order of the day" issued to NCC cadets, said 26,00,000 boys and girls in schools and colleges throughout the country had received training up to now. He said NCC would provide the armed forces with a potential reserve of officers to draw upon.

Facility for Service Personnel

The Union Ministry of Defence has proposed that provision be made by Indian universities to enable military personnel to appear in various examinations as private candidates. The universities are being asked to extend this facility for the period of the national emergency and three years thereafter. The facility will, however, not be available for courses which require laboratory work.

Exhibition Hockey Match

An extra hour of thrill for the university students taking part in the Inter-University Youth Festival was provided by the exhibition hockey match organised jointly by the Union Ministry of Education and the Inter-University Board of India on November 15 at the Northern Railway Stadium. The match was played between teams comprising outstanding hockey players drawn from 11 universities. The performance of the young players was impressive by any standards and one could even discern in some the makings of India's hockey stars of tomorrow.



The players from 11 universities who took part in the exhibition hockey match held in New Delhi at the time of the Inter-University Youth Festival with Shri R. K. Kapoor, Joint Secretary, Ministry of Education; and Dr. B.D. Laroia, Secretary, Inter-University Board.

The university hockey players gave another, and perhaps more cogent, proof of their excellence when the Combined University XI got the better of the Delhi Hockey Association XI at the Lady Hardinge Grounds on November 16. Despite lack of combined practice, they gave a good account of themselves and beat the rival team (which included two all-India players) by two goals to one.

I.U.B. Meeting

(Contd. from page 1 col. 3)

The Board will consider proposals received from various universities Ministry of Education and the Directorate of NCC, and will evaluate the progress made by member institutions towards implementing various recommendations made at the Board's last annual meeting held in Bombay in February, including those pertaining to the compulsory NCC scheme, acceleration of medical and engineering courses and General Education.

Seminars

In addition to official business at the Board meeting, there will be two seminars to mark the quinquennial conference. The subjects for discussion at the seminars will be "Three-year Degree Course Including P.U.C." and "University Administration Including Finance".

INTER-UNIVERSITY TOURNAMENTS

The following are the results of the Inter-University Tournaments held so far :

Tournament	Winners	Runners-up
Basket-Ball (Men)	Panjab	Bombay
.. (Women)	Panjab	Kurukshetra
Badminton (Men)	Bombay	Delhi
.. (Women)	Bombay	Panjab
Foot-ball	Calcutta	Osmania
Kabaddi	Bombay	Shivaji
Swimming (Men)	Calcutta	Bombay
.. (Women)	Calcutta	Poona
Diving	Calcutta	Agra
Water-Polo	Calcutta	Baroda
Table-Tennis (Men)	Bombay	Delhi
.. (Women)	Vikram	Bombay
Volley-Ball (Men)	Kerala	Agra
.. (Women)	Vikram	Panjab
Wrestling	Poona	Panjab

PERSONAL

Dr. Triguna Sen, who completes eight years of Rectorship at Jadavpur University on January 15, 1964, has been reappointed for the third term of office for a period of four years.

Dr. (Smt.) Premila V. Thackersey has been re-elected to the Vice-Chancellorship of SNDT University, Bombay, for a further period of three years with effect from September 1963.

Shri Lalbhaji Ratanji Desai has been reappointed Vice-Chancellor of Gujarat University for a further period of three years w.e.f. November 30, 1963.

Shri Ishwarbhai J. Patel assumed office as the new Vice-Chancellor of Sardar Vallabhbhai Vidyapeeth on November 16, 1963, vice Dr. Maganbhai D. Patel resigned.

Dr. G. S. Mahajani took over charge as the first Vice-Chancellor of Udaipur University on November 20, 1963.

Shri P. Deo, a former High Court Judge has been elected Vice-Chancellor of Nagpur University vice Shri S. P. Kotval resigned.

Dr. P. K. Kiehl, who recently retired from Professorship at Delhi University, has been appointed Director of the National Physical Laboratory, New Delhi.

Dr. M. L. Dhar, Deputy Director-in-charge, Central Drug Research Institute, Lucknow, has been appointed Director of the Institute w.e.f. August 29.

Dr. R. C. Mehrotra, Dean of the Faculty of Science, Rajasthan University, has been nominated to the Board of the Council of Scientific & Industrial Research.

Dr. P. C. Gupta, Professor of History, Jadavpur University, left for a lecture tour in Czechoslovakia. He will deliver lectures at various university centres and at the Oriental Institute, Prague.

ADVERTISEMENT RATES

Space	Per Insertion	For 4 Insertions
Full Page (18x24cm.)	Rs. 300	Rs. 1,000
Half Page	Rs. 175	Rs. 600
Quarter Page	Rs. 100	Rs. 320
5.5x6 cm. space (17 lines)	Rs. 40	Rs. 100

For

QUALITY & RELIABILITY

Insist on Indian Make

Toshniwal

LABORATORY
ELECTRONICS

ENGINEERING & INDUSTRIAL
INSTRUMENTS

Contact :

TOSHNIWAL BROTHERS PRIVATE LTD.

198, Jamshedji Tata Road, Bombay-1

Branches :

Kacheri Road,
Ajmer.

85-A Sarat Bose Road,
Calcutta-26.

3/8 Jhandewalan Extn.,
New Delhi-1.

Round Tana, Mount
Road, Madras-2.

GAS PLANTS

STEEL TANKS-LAB FURNITURE

GASHOLDERS & BURNERS

LAB GAS & WATER TAPS

STRUCTURAL WORKS

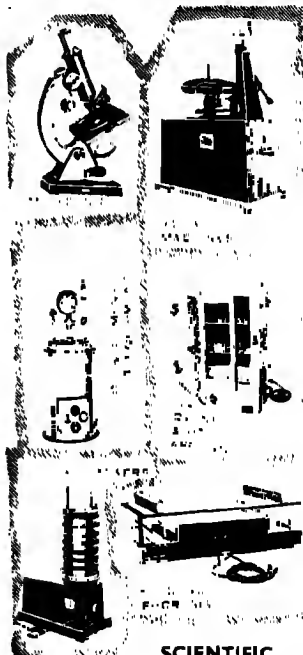
GAS METERS & BOOSTERS

MANSFIELD

E.P.O. Box No. 124 Del.-1 Phone: 242662-3)
Post Box No. 129, Madras-1 Phone: 5711
Post Box No. 1048, Delhi-6 Phone: 221191

Cable: GASIFY Calcutta, Madras, Delhi

SEW INSTRUMENTS



SCIENTIFIC
EQUIPMENT WORKS

4777 NICHOLSON ROAD

DELHI - 6

STERLING SEC-20

The ENGLISH LANGUAGE BOOK SOCIETY

&

Leading British Publishers

ANNOUNCE

Their **LOW-PRICED TEXTBOOK** Series in ►

Each title carries its distinctive coloured label

(Dark Red 21s./Rs. 16.80; Green 15s./Rs. 12;
Orange 12s./Rs. 9.60; and Blue 9s./Rs. 7.20)

AGRICULTURE
BUSINESS ADMINISTRATION
CHEMISTRY
ECONOMICS
ENGINEERING
MATHEMATICS
PHYSICS

The use of special measures has made the reduction possible, but in every case the original text and diagrams have been retained.

Please ask your bookseller to show you his stock of the series.

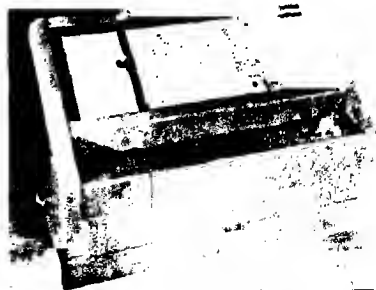
Watch also for announcements of other series which the Society is planning for the non-specialist.

HILGER ULTRASCAN

**FAST INEXPENSIVE RECORDING SPECTROPHOTOMETER
FOR RAPID ANALYSIS IN THE ULTRA-VIOLET AND VISIBLE REGIONS**

Features :

- Separate light sources for the ultra-violet and visible regions with automatic changeover
- Two symmetrical slits coupled and programmed
- Littrow monochromator with specrosil prism
- Balanced photometer system
- Parallel light paths within the photometer
- Three scanning speeds
- Scanning speed selector
- Automatic gain control
- Spectra plotted linearly in frequency on charts calibrated in wavelength
- Interchangeable ordinate scales. linear in density or transmission
- Simple non-clogging stylus as recorder pen
- Scale expansion for low transmission/high density
- The whole range of 200-750 nm or any chosen part can be covered in one-scan on one chart



ATTACHMENTS FOR FLAME SPECTRA, CHROMATOGRAPH STRIP, DIFFUSE AND SPECULAR REFLECTANCE ETC. ALSO AVAILABLE

For full details write to :

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LIMITED

India House,
Fort Street,
BOMBAY-1

Sunlight Building,
Asaf Ali Road,
NEW DELHI-1

85 Gillanders House,
Post Box No. 2136,
CALCUTTA-1

FOR
CONTEMPORARY
ARTICLES OF OPINION
READ

The American Review

A QUARTERLY

The AMERICAN REVIEW is an informative magazine containing authoritative articles by eminent educationists and authors on all aspects of American life and civilization. The subjects covered include art, literature and philosophy, economics, science, sociology, education and law.

Mail this order form
to the nearest
principal subscription
agent below :

M/s. Lalvani Bros.
Taj Building
210 Dr. D.N. Road
Bombay-1.

M/s. Patrika Syndicate (P) Ltd.
Gole Market 12/1 Lindsay St.
New Delhi-1. Calcutta-16.

The Swadesamitran Ltd.
Victory House
Mount Road
Madras-2.

ORDER FORM

Please send

THE AMERICAN REVIEW

1 YEAR (4) ISSUES ☐ Rs. 3.00

2 YEARS (8) ISSUES ☐ Rs. 5.00

NAME.....

ADDRESS & P.O.....

CITY.....ZONE.....

DISTRICT.....STATE.....

I enclose payment of Rs.....by
cheque/postal order.

Date.....Signature.....

EDUCATIONAL EQUIPMENT

ANALOGUE COMPUTER

Provides introduction to computing, allowing experience to be gained in scaling, choice of time constants, etc. Repetitive or continuous solution of linear differential equations; Simulation of servo mechanisms and other dynamic systems.



TRANSFORMER ANALOGUE NETWORK ANALYSER

Universal Impedance Units;
Two or four instrument measuring system;
Crystal Oscillator supply;
Polar Generator Units.



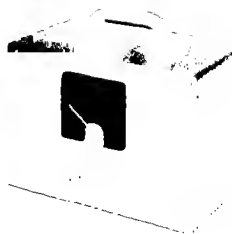
LOGARITHMIC AMPLIFIER DETECTOR

50 c/s or 1000 c/s. Logarithmic range 300 μ V to 1V; Minimum detectable signal 100 μ V;
Input Impedance 300K Ω for 1000 c/s version : 10K Ω for 50 c/s version : 20V input will not damage instrument.



VALVE VOLTMETER

A.C. ... D.C. 0 to 250V in 5 ranges;
Impedance 10M Ω on all D.C. ranges;
2 M Ω and 6 pF on all A.C. ranges;
Accuracy $\pm 1\%$ up to 10 Mc/s.



—Just a few of the many experimental instruments we supply to the academic world. Please write for further details to:

F. C. ROBINSON AND PARTNERS LTD.

Specialists in Electronic Equipment and Instrumentation

SOUTHERN SALES AND EXPORT : DAVIES HOUSE, 181 ARTHUR RD.
WIMBLEDON, LONDON S. W. 19, ENGLAND.

**Eastern
Economy
Edition**

Priced at one-third or less the price of the original U.S. editions recommended by Indian universities, 3E texts can help you share in the scientific knowledge being acquired, the technological techniques being perfected, and the intellectual enquiries being made in the world today.

EVERY STUDENT CAN AFFORD 3E TEXTBOOKS
available at all educational bookstores

Prentice-Hall of India (Private) Ltd.

M-97. AGGARWAL BUILDINGS, CONNAUGHT CIRCUS, NEW DELHI - I

Reflections . . .

WITH this issue, *University News* enters the second year of its publication. It is natural, therefore, that we are inclined to look back and take an overall view of the ground the journal has covered during the first year of its existence. This appraisal of the past might also give us an insight into the future.

The starting of *University News* was a venture in an altogether new direction on the part of the Inter-University Board of India. The main objective of the Board was to provide an effective link between various Indian institutions of higher learning and an all-India medium for disseminating information, statistical and otherwise, on current educational trends. During the past year, *University News* strove to meet this objective by serving as a "projection screen" for the main developments in the field of higher education in this country. The growing readership of *University News*, frequent indents for its back issues, and the numerous "bouquets" of commendatory expressions from our readers are all indicative of its success and popularity. Our foreign readers, too, have blessed the journal in no uncertain terms. Realising its value as a mirror of contemporary Indian educational development, the Ministry of External Affairs has undertaken the distribution of 110 copies of the journal to Indian missions abroad.

While we derive encouragement and gratification from this side of the picture, we find there is one aspect which is a cause of concern to us. There are still many small affiliated colleges that are not on our subscribers' list. By keeping the subscription low we hoped that these colleges in mofussil areas, to which educational news travels at a snail's pace, would benefit from our journal. Maybe we are rather too impatient, maybe a hundred per cent success is not a common phenomenon.

Yet, perhaps, the basic success of our journal lies in its being a pioneer publication of its kind. Since the commencement of its publication in February 1963, a new trend in the country has made itself manifest through the increasing number of educational magazines, tabloids and news sheets. We welcome all these new additions, for they are all useful in their own way. The amount of educational periodical literature processed in the world's more advanced countries is considerably greater than in India. The differences in the general level of educational development and resources apart, there is definitely a marked proclivity in these countries to harness various information media to the fullest extent possible for promoting educational development. Indeed, it is through the dissemination of information on a wide scale that the sphere of understanding can be enlarged and a proper co-ordination of thought and action maintained.

We take this opportunity to appeal to all those individuals and organisations who are engaged in educational activity to keep us posted with new developments in their respective spheres, so that *University News* may succeed in covering as wide an educational field as possible.

NEW EDUCATION COMMISSION SOON

The Union Minister for Education, Shri M.C. Chagla, announced in the Lok Sabha on March 12 that a commission of specialists, including some foreign experts, would be appointed shortly which would make an overall survey of education in India and submit its report in 12 to 14 months' time. Shri Chagla was replying to the debate on his Ministry's demands for grants for the year 1964-65.

The proposed commission would make a thorough evaluation of education today and tomorrow, bearing in mind the roots of our culture and civilisation and the need to develop education on scientific lines.

All-India Service

Shri Chagla stated that most of the States had agreed to the formation of an all-India education service, although there might be a difference of opinion in regard to the cadres to be covered under this scheme.

He expressed his agreement with the proposal to make education a concurrent subject. On the question of language, he reiterated his view that the regional languages must become the media of instruction at the universities in course of time and that until Hindi was established as the link language, English must continue to play that role. The only possible solution was that all three languages must be learnt—regional, Hindi and English.

Shri Chagla also gave an indication that along with the extension of correspondence courses and evening colleges for students, he was thinking of having correspondence courses for teachers as part of a "crash programme" of teacher training.

Ministry of Education Reorganised

A Presidential Order has been issued to abolish the division of the Ministry of Education into the Departments of Education and Science.

The two departments were set up after the merger of the Ministry of Scientific Research and Cultural Affairs with the Ministry of Education in November 1963 when Shri Chagla joined the Union Cabinet. As a result of the abolition of this division a reallocation of work among the different units within the Ministry would be facilitated. It is proposed to include technical education in the unit dealing with general education and also to entrust all categories of scholarships to one section to eliminate confusion and to ensure planning in regard to trained personnel.

It is understood that in future, except for selected fields requiring special attention, the Central Advisory Board of Education would remain the principal advisory body for the Ministry; the State Education Ministers' Conference would be the reviewing and implementing body at the highest level; and matters of technical nature would be referred to the National Council of Educational Research and Training.

Rationalisation

The new Education Minister has also taken various measures to effect economy in administrative expenditure and increase efficiency. A number of committees which have outlived their usefulness, have been wound up and the expenditure on the purchase of equipment, stores and publications has been reduced to the minimum. Several procedural simplifications suggested by the special reorganisation unit have also been introduced.

Education Ministers Meeting

The Union Education Minister, Shri M.C. Chagla, has convened a meeting of the State Education Ministers for April to discuss issues relating to long-term and short-term educational development. Among the specific issues expected to come up for discussion at the meeting are education as a concurrent subject, language policy, and secondary education.

Central Planning Group on Education

The Government of India has set up a Central Planning Group on Education under the chairmanship of Shri M. C. Chagla, Union Minister for Education, for the preparation of the broad outline of a perspective plan of educational development in India to cover 15 years (1966-81) and, against its background, a detailed programme for inclusion in the Fourth Plan (1966-71). The first meeting of the group was held in New Delhi on March 13.

Though in a sense complementary to the proposed commission on education, the group would be concerned with long-term planning. Besides this group, there are two other working groups on general and technical education which are mainly concerned with drawing up programmes for the Fourth Plan.

The 14-member Central Planning Group consists of, among others, Shri M. Bhaktavatsalam, Chief Minister of Madras; Dr. V.K.R.V. Rao, Member, Planning Commission; Dr. D.S. Kothari, Chairman, UGC; Shri S.H. Ziaheer, Director-General, CSIR; and the Maharaja of Patiala.

Education Minister Confers With V.Cs.

The Union Education Minister, Shri M.C. Chagla, met Vice-Chancellors of South Indian universities in Madras on March 8 and had a free and frank exchange of views on several matters pertaining to university education, including university autonomy, the system of matching grants which has not worked very satisfactorily so far, proper recognition of the Inter-University Board as the corporate body of Indian Vice-Chancellors, exchange of professorships and fellowships, medium of instruction and standard of English at Indian universities.

The problem of pressure of admissions on the universities was also considered and it was thought that diversified avenues to students after school education must be made available to reduce this pressure. In this context, attention was also drawn to evening colleges and correspondence courses as possible solutions to the problem.

Universities in the Offing

The Andhra Vidhan Sabha has passed the Bill for establishing an agricultural university at Rajendranagar, Hyderabad.

★

The Government of Rajasthan has decided to establish a Sanskrit university in the State. A seven-member committee, under the chairmanship of Shri Vishnu Dutt Sharma, State Education Secretary, has been constituted to suggest ways for establishing the university with Sanskrit as the medium of instruction and Ayurveda as the main faculty.

★

The Government of Gujarat has appointed a 10-member committee under the chairmanship of Shri Lalbhai R. Desai, Vice-Chancellor Gujarat University, to report on establishing two new universities in the State, one in south Gujarat and the other in the Saurashtra region.

★

The Madhya Pradesh Minister for Agriculture, Shri Arjun Singh said recently that the proposed rural university for Jabalpur would begin functioning from the next academic year.

★

The Himachal Pradesh Revenue Minister, Shri Karam Singh, told the Vidhan Sabha recently that the Government proposed to establish a separate university in Himachal Pradesh during the Fourth Plan period.

★

UGC has accepted in principle the need for the establishment of a university each in Goa and Pondicherry during the Fourth Plan period.

★

A committee appointed by UGC under the chairmanship of Prof. A.R. Wadia recently visited Nagaland, NEFA, Manipur and the hill areas of Assam to study the possibilities of setting up a university for these areas.

Chagla's Plea for Making Study of English and Hindi Compulsory at Universities

In the course of his convocation address at Jodhpur University on January 12, Shri M.C. Chagla, Union Education Minister, made a fervent plea for making the study of both Hindi and English compulsory through all stages of university education.

He said while the universities could not and should not be prevented from gradually adopting the regional languages as media of instruction, they must constantly bear in mind the basic need for a common language at the university level. The only way to do it was to make the study of Hindi, which had been envisaged as the national language, compulsory through all stages of university education.

Importance of English

Continuing the Minister said: "But I would go further. We should also make the study of English equally compulsory because even when Hindi has become, in the true sense of the term, the official language of India, the usefulness of English will always remain. It constitutes a window through which we can look upon the world outside. It will be the window through which all the winds of new ideas, new thoughts can blow into our own country. It will always remain a language of international relations and a language of science. It is a great cultural asset we possess today and it will be a shame and a tragedy if as a gesture to political chauvinism we throw it away."

Need for Textbooks

He also emphasised that the changeover from the existing medium of English (35 out of 55 Indian universities still retain English as the medium of instruction) to the regional languages should be gradual to avoid lowering of standards. For one thing, we did not have the necessary textbooks in the regional languages. The difficulty with regard to science was even greater. One could at least translate textbooks in the humanities, but in science, apart from the textbooks, the student had to keep pace with new discoveries and this he could only do if he was familiar with the large number of scientific journals published in English and other European languages.

Student Indiscipline

Touching on the problem of student indiscipline, Shri Chagla said: "I think, in the first place, students' indiscipline has been exaggerated and we are apt to concentrate on isolated instances forgetting the large body of students who carry on their work quietly and conscientiously. In the second place, students' indiscipline is a symptom and not a disease. We cannot remove the symptom unless we cure the disease. The disease is a sense of frustration among the students."

Among the other causes of student indiscipline he listed a sense of discontentment arising out of unsatisfactory conditions of work, lack of the requisite qualifications on the part of teachers, and the dreary prospect of unending unemployment.

Extension Work Major Function of Agricultural Universities—V.K.R.V. Rao

Delivering the first convocation address at Udaipur University on February 2, Dr. V.K.R.V. Rao, Member, Planning Commission, stated that an agricultural university was charged with three principal functions, namely education, research and extension, and added that the last aspect gave it a character distinct from other universities.

He said the university could not just content itself with tackling technical and scientific problems of agriculture. It must also keep itself informed of the social and economic problems facing the agricultural community and be ready to lend its expertise and informed judgment for the solution of those problems. He remarked that the university should truly become "Rajasthan Farmers' University". One reason for the setting up of agricultural universities was to break the barrier between agricultural graduates and the farming community.

Kabir's Formula for Solving Language Tangle

Addressing the first convocation of Punjabi University, Patiala, on January 18, Prof. Humayun Kabir, Union Minister for Petroleum and Chemicals, offered a solution for the language problem of India.

According to him, children must start their education in the mother tongue which would be identical with the regional or State language. At the age of nine or ten, children would be introduced to a second language and one year thereafter to a third. It may be left to the State Government to decide whether English or an Indian language would be introduced first in this arrangement, but in any case from the age of ten or eleven till the end of the secondary stage, all children would be learning three languages. In order to reduce the burden on the children it would be desirable to try to reduce the number of scripts to be learnt. One possible solution would be to teach the mother tongue in the regional script and the other two in Roman.

(Contd. on page 7, col. 1)

We hope that the notion that to hold a doctorate is an essential qualification for every applicant for a university post will never become established in this country.—ROBBINS COMMITTEE (U.K.)

39th Annual Meeting and 9th Quinquennial Conference of I.U.B.



Vice-Chancellors, delegates and other invitees who attended the 39th annual meeting and ninth quinquennial conference of the Inter-University Board at Varanasi. Seated in the centre is Dr. Karan Singh, Chancellor of Banaras Hindu University, who inaugurated the conference.

Dr. Karan Singh Outlines Three Broad Functions of Indian Universities

Inaugurating the 39th annual meeting and the ninth quinquennial conference of the Inter-University Board at Banaras Hindu University on December 29, 1963, Dr. Karan Singh, Sadr-i-Riyasat, Jammu & Kashmir and Chancellor of the host university, enumerated three broad functions which an Indian university is expected to fulfil.

The first was to create a body of young men and women technically equipped to deal with the expanding administrative and technological demands that face the country in the future; secondly, to pour into society a steadily growing stream of young people who would be intelligent, enlightened and responsible Indian citizens and who would inevitably form the backbone of our democratic polity; and thirdly to give each one of its students sufficient intellectual stimulation to enable him to actualize his inner potentialities and attain as high a material, moral and spiritual equilibrium as possible.

He also emphasised the importance of eliciting from the younger generation that "creative idealism" without which no nation could become and remain great.

National Integration

Dr. Karan Singh reminded the universities that apart from filling a particular role in the region in which it was situated, every university in this country was an Indian university and must, therefore, partake of "a common cultural and academic sub-stratum" to offset the danger of regional and provincial exclusiveness. "It has become unfashionable to talk of national integration since the

Chinese aggression last year, because it is assumed that this external threat at one stroke achieved which we had been trying to do ever since 1947. I believe however, that this is a facile and unjustified assumption, and that we must continue to work actively for national integration and solidarity."

Dr. Karan Singh suggested that the Inter-University Board of India should promote horizontal mobility of teachers and students from one university to another. It should also act as a clearing house for all types of information connected with the universities, and for this purpose it must build up a strong statistical cell. This, he said, necessarily implied a planned and regular publications programme covering all aspects of university activity.

Concourse of Academicians

The three-day conference was attended by 35 Vice-Chancellors from Indian and Ceylonese universities, some 50 delegates representing various faculties and academic

bodies of the member universities, besides several invitees representing UGC, the Ministries of Education, Health, Food and Agriculture, and Community Development, and the Directorate of NCC in the Ministry of Defence. Observers from the British Council, Ford Foundation, U.S. Educational Foundation, and USIS were also present. Among the distinguished foreign guests were Shri Ranadhir Subba, Vice-Chancellor, Tribhuvan University, Katmandu; and Dr. Prachoom Chomchai, Secretary, Association of South East Asian Institutions of Higher Learning, Bangkok.

Dr. Triguna Sen, Rector, Jadavpur University, presided over the conference.

Dr. Triguna Sen Warns Against Short-cuts in Education

"Our new educationists are in a great hurry, but it is possible that the desire to take short-cuts was never more dangerous than to education at the university level," said Dr. Triguna Sen, President of the Inter-University Board, while addressing the fellow Vice-Chancellors and others at the 39th annual meeting of the Board held at Varanasi in December last.

He strongly deprecated the tendency on the part of some people to think of universities as places where one need only cover certain syllabi and prepare for examinations. These people, he said, overlooked the real function of the university which was to elicit the maximum intellectual power of students.

Role of I.U.B.

A voluntary organisation like the Inter-University Board, Dr. Sen said, could serve as an effective instrument for bringing about co-ordination and maintenance of standards, fulfil the ideals of university education, and help maintain the autonomy of the universities. The advice of this organisation, working on a voluntary and friendly basis, would command more respect than any advice from the Government or a statutory body. He added if the Inter-University Board and the University Grants Commission could work hand in hand as sister organi-



Shri N.H. Bhagwati, Vice-Chancellor of the host university, welcoming the V.Cs. and other invitees.

sations, planning their resources without any duplication of work, good results could be achieved in the foreseeable future.

In a reference to the unilateral action taken by the Education Ministry in selecting representatives to the Commonwealth Universities' Congress held in July 1963, Dr. Sen said although the Government had no intention of sending an official delegation, its action created the impression among the delegates to the congress that the Indian delegation consisted of Vice-Chancellors nominated by the Government. He expressed the hope that there would grow between the Government and the universities a bond of mutual respect and confidence, so that there would be no scope for any misunderstanding in future.

I.U.B. Admits Five New Members

Five universities were newly admitted to the membership of the Inter-University Board at the Board's meeting. These were: Jodhpur University, Jodhpur; Punjabi University, Patiala; Varanaseya Sanskrit Vishwavidyalaya, Varanasi; Shivaji University, Kolhapur; and Udaipur University, Udaipur. This raises the number of member universities from 42 to 47, the Indian Agricultural Research Institute, New Delhi,

being an additional associate member of the Board.

The requests of the Universities of Bhagalpur and Magadh (Gaya) and the five Indian Institutes of Technology for admission to membership were also considered and then referred to the visiting committees constituted for this purpose in conformity with the normal procedure of the Board for admitting new members.

New I.U.B. President

Dr. A.C. Joshi, Vice-Chancellor, Panjab University, was elected new President of the Board for the year 1964-65.

Rural Services Diploma

The question of recognising the rural services diploma for the purposes of admission to training colleges or colleges of education was reconsidered by the Inter-University Board at its Varanasi meeting. The Board, however, reiterated its previous resolution according to which the rural services diploma is recognised (for a period of 5 years in the first instance) for purposes of admission to post-graduate courses in Economics, Political Science, Sociology, History and similar disciplines in the humanities. The diploma, however, was not recognised for admission to professional training in Education, Law or Public Administration.

Introducing New Members...

The Inter-University Board, at its meeting held at Varanasi in December 1963, admitted five new universities to its membership. A brief description of each one of them is given below:

JODHPUR UNIVERSITY

Jodhpur University was established in July 1962 as a unitary type teaching university. It has four constituent colleges and one affiliated college, all located at Jodhpur. There are approximately 5,000 students on the rolls, including about 80 research scholars.

The university has the Faculties of Arts, Science, Social Sciences, Commerce, Engineering, Law and Education. Instruction up to post-graduate standard is provided in all departments, excepting in the Departments of Sanskrit, Music, Engineering, and Education, where teaching is provided only up to the degree level.

The courses of study approved by the university for its examinations of 1962-63 were the same as prescribed by Rajasthan University. However, from the academic year 1963-64, the university will follow its own courses of study.

PUNJABI UNIVERSITY

Punjabi University started functioning in April 1962, when nine colleges situated at Patiala, which had hitherto been associated with Panjab University, were transferred to it. The total enrolment at these colleges was 3,906. The university has the Faculties of Arts & Social Sciences; Science; Business Administration & Commerce; Languages; Education; Medicine; and Engineering & Technology. The number of students receiving post-graduate training at the university and its affiliated colleges is 243.

One of the main objectives of the university is to promote Punjabi studies and develop the Punjabi language. Alongwith Hindi and English, Punjabi has been introduced as the medium of instruction in social sciences at the undergraduate level. Besides, the university has set up two special departments, one of Translation and the other of Punjabi Historical Studies. While the former will produce Punjabi translations of classics and standard works and prepare textbooks in Punjabi, the latter will prepare in



A general view of the business meeting of I.U.B.

Punjabi a comprehensive eight-volume history of the Punjab beginning from the pre-Aryan times.

SHIVAJI UNIVERSITY, KOLHAPUR

Shivaji University, Kolhapur, established in September 1962, is the youngest of the 55 universities at present functioning in India. It was carved out of Poona University by placing within its jurisdiction the five districts of Kolhapur, Ratnagiri, Satara, Sangli and Sholapur. The university thus took over 33 colleges and one research institute (G.K. Institute of Rural Education, Gargoti) from Poona University. Since then four more colleges have been affiliated to it.

The university has the Faculties of Arts, Social Sciences, Science, Law, Medicine, Commerce, Agriculture, Engineering and Education. At present teaching facilities are available in the affiliated colleges only, including post-graduate training in the humanities and social sciences, but it is proposed to start post-graduate classes in Physics, Chemistry, Botany, Zoology and Mathematics very shortly.

UDAIPUR UNIVERSITY

Udaipur University is the new name given from October 1963 to the erstwhile Rajasthan Agricultural University which was established in July 1962. The change in the name of the university is indicative of its enlarged scope to impart education

in various branches of humanities, social sciences and sciences. However, the university will retain its bias in favour of agricultural sciences.

At present two agricultural colleges, one at Udaipur and the other at Jobner, and the College of Veterinary and Animal Science, Bikaner, are affiliated to this university. It is expected that the College of Home Science and the College of Arts and Science at Udaipur will soon be brought into its fold.

VARANASEYA SANSKRIT VISHWAVIDYALAYA

Varanaseya Sanskrit Vishwavidyalaya Varanasi, is one of the two Sanskrit universities functioning in India, the other being Kameshwara Singh Darbhanga Sanskrit University, Darbhanga. It is the successor to the ancient Government Sanskrit College established by the East India Company in 1791. This college was transformed into the teaching-cum-affiliated Sanskrit university by an Act of the Uttar Pradesh legislature in 1956. Today 1,036 Sanskrit mahavidyalayas (colleges) spread over many States are affiliated to this Vishwavidyalaya. It conducts Prathama, Purva Madhyama, Uttar Madhyama, Shastri, Acharya, Vachaspati, and Vidya Vidyarthi examinations which are equivalent to the junior high school, matriculation, Intermediate, B.A., M.A., Ph.D. and D. Litt.

(Contd. on page 12, col. 1)

Indian Teachers for African Universities

The Inter-University Board, at its meeting held in December at Varanasi, supported a proposal to make available Indian teachers for staffing African universities. The Board commended the idea to the universities, UGC and the Government of India and suggested that orientation courses be organised for those Indian teachers who might like to join African universities.

The Government of India has since decided to maintain a panel of qualified and experienced Indian experts in teaching, medical and engineering fields for meeting expeditiously demands from Asian and African countries. Application forms are available from the Foreign Assignments Section of the Ministry of Home Affairs.

Hostel for Oversea Students

The Rotary Club of Bombay has decided to put up a big hostel in the city for oversea students, especially those from African countries.

(Contd. from page 3, col. 3)

Increasingly, the mother tongue would also become the medium of instruction in the universities and a definite time-table for the purpose must be laid down. At the university stage, there must inevitably be a period of bilingualism, but at the appointed time the medium would be an Indian language. English however, would remain a compulsory subject of study.

Prof. Kabir said while the language was something intrinsic to personality and the alphabet had a certain relation to the language, the script consisted of mere visual signs to refer to particular letters in the alphabet. He added that from the standpoint of clarity, legibility and ease of manual and mechanical manipulation, the Roman script had advantages over most Indian scripts. It would, of course, be necessary to add some additional symbols to the Roman script in order to represent the additional letters included in the Sanskrit alphabet.

Tax Exemption for Visiting Professors

The Government of India has decided to exempt from tax the salary income of professors and teachers of foreign nationality visiting Indian universities and other educational institutions on the same conditions as are applicable to foreign technicians. It is realised that visiting teachers play an important role in the progress of specialised studies in the fields of science, technology and arts in our country and the prevalent high rates of progressive taxation give rise to difficulties in the free utilisation of the services of foreign specialists.

Indo-Soviet Exchange Plan

India and the U.S.S.R. have agreed to expand the existing programme of scientific and cultural exchanges during the year 1964-65. Shri M.C. Chagla, Union Education Minister, and Mr. S.K. Romanosky, Chairman of the Soviet State Committee for Cultural Relations with Foreign Countries, exchanged letters providing for the expanded programme in New Delhi on March 2.

Under the new programme, which gives special attention to scientific subjects and higher education, 50 Indian post-graduate students will study at Soviet higher educational institutions in 1964-65. The programme also includes exchange visits by scientists.

Indian Students in Russia

Mr. Vyacheslav Yelyutin, U.S.S.R. Minister for Higher and Specialised Education, who recently concluded his nine-day visit to India at the invitation of Shri M. C. Chagla, Indian Education Minister, said in an interview in New Delhi that 222 Indians were receiving training at various higher and technical institutes in the Soviet Union. Of these 109 were post-graduate students and 20 professors.

He added that 22 Soviet students were studying at Indian institutions in Delhi, Bombay, Calcutta and Lucknow, and 32 Soviet professors were working at various Indian Institutions.

VISITORS

Prof. John Raymont, well known marine biologist and Professor of Zoology at Southampton University, arrived in India on March 9 for a three-week session of talks with research workers at the Porto Novo marine laboratories of Annamalai University. He is accompanied by his wife, who too is a marine biologist.

★

Dr. B. Landbeer, Professor of Sociology at the University of Groningen, Netherlands, joined Rajaratan University's Department of Sociology as a visiting professor from February 2.

★

Prof. N.V. Belov, a member of the U.S.S.R. Academy of Sciences, has recently taken up his assignment as a visiting professor at the Centre of Advanced Studies in Crystallography and Biophysics at Madras University. During his three-month stay in India Prof. Belov expects to visit some other universities as well. He has been deputed to India under the Unesco project of assistance to Centres of Advanced Studies.

★

Prof. I. Novojilov, 39-year old Vice-Chancellor of Leningrad University and Head of the Department of Theoretical Physics, arrived in New Delhi on January 27 to take up his assignment at the Department of Physics, Delhi University, as a visiting professor under the Unesco assistance project. He will stay in India for three months.

★

Prof. K.A. Krasilnikov, State Director, Institute of Microbiology of the U.S.S.R. Academy of Sciences, has joined the Centre for advanced Studies in Mycology and Plant Pathology, Madras University, as a visiting professor under the Unesco assistance programme.

U.N Aid for Regional Engineering Colleges

The Governing Council of the UN Special Fund has sanctioned \$4,065,300 for three projects to be carried out in India.

Of this \$1,481,000 are to assist the Survey of India in pre-investment mapping ; \$491,300 for the establishment of four logging training centres ; and \$2,093,000 for assistance to six regional engineering colleges.

The project of assistance to the six regional engineering colleges is intended to complement the earlier project approved by the Governing Council at its June 1963 session to furnish instructional equipment to the Regional College, Warangal, where a model engineering programme will be established with the assistance of an international expert teaching team. The Special Fund is now offering assistance to six other regional colleges, namely those at Mangalore, Durgapur, Nagpur, Bhopal, Jamshedpur and Allahabad.

80 Fulbright Travel Grants

During 1964-65, the U.S. Educational Foundation in India will award about 80 Fulbright travel grants for post-graduate study in the U.S.A. in all fields except engineering.

Candidates should hold a letter of admission from an American university and a documented guarantee of financial support equivalent to Rs. 13,000 for one academic year. They should not have studied in the United States at the college level within the last five years.

The minimum qualifications required are a second class Bachelor's degree and a second class post-graduate degree or diploma plus two years' specialised or research experience. Age : preferably between 24 and 35 years.

Application forms can be secured from one of the regional offices of the Foundation in Bombay, Calcutta, Madras or New Delhi by giving full particulars in writing. Last date for submission of application forms : April 10, 1964.

Grants & Awards

U.S.A.I.D. Assistance for Educational Tours

The United States Agency for International Development (USAID) is understood to have submitted a proposal to the Government of India, under which Indian Vice-Chancellors, professors, heads of department, principals of colleges and educational administrators would be offered facilities to visit the United States for exchange of ideas and getting acquainted with the latest developments in their fields.

Australian Research Scholarships

The Australian National University invites applications from 1st class graduates with some research experience for the award of research scholarships to enable them to pursue the Ph.D. course of the university in any subject in the humanities, social sciences or sciences. The value of the scholarship is £A1025 per annum plus travel and family allowances. Further particulars and application forms may be obtained from the Secretary, Inter-University Board of India, Rouse Avenue, New Delhi-1, by those who are eligible for the award and recommended by their respective universities.

Fellowship in Public International Law

The British Institute of International and Comparative Law is, for the third year, offering an overseas research fellowship in Public International Law. The fellowship, which will be of the value of £ 800 per annum (with up to £ 200 as an additional travelling allowance), will be tenable for one year from October 1964 by a graduate in Law. The Institute may be able to consider the award of one or more additional fellowships if suitably qualified candidates present themselves.

Applications giving full particulars and a statement of proposed programme of research should reach

the Director, British Institute of International and Comparative Law, 1. Temple Gardens, Temple, London, E.C.4 by May 22, 1964.

Kalinga Prize for American Writer

Mr. Gerard Piel, eminent American science writer and publisher of the *Scientific American*, received the 11th International Kalinga Prize at a special ceremony held at the India International Centre, New Delhi, on February 6.

The Kalinga Prize, which is awarded by an international jury appointed by Unesco, is a donation of £ 1,000 by Shri Bijoyanand Patnaik, former Chief Minister of Orissa and director of the Kalinga Foundation, for the popularisation of science.

Research Grants for Teachers

To encourage research in the universities and colleges by teachers, UGC has instituted a scheme to provide financial assistance up to a maximum of Rs. 5,000 per scholar for the purchase of equipment, chemicals and books etc. not normally provided by the institutions.

Under this scheme, UGC has selected 84 teachers in universities and colleges for grants during 1963-64. Of these 60 teachers are pursuing research in science subjects, five in engineering and technology and 19 in humanities and social sciences.

Grants for Exchange of Teachers

UGC has decided to grant between Rs. 10,000 and Rs. 15,000 to each university every year to meet the expenditure on the exchange of teachers.

Rs. 1.53-Lakh Grant for Aligarh Medical College

UGC has sanctioned a non-recurring grant of Rs. 1.53 lakhs and a recurring grant of Rs. 5 lakhs for the Medical College of Aligarh Muslim University. An additional recurring grant of Rs. 50,000 has been approved for the Institute of Ophthalmology attached to the college. As a result, the initial annual intake in the college will be raised from 40 to 70, and finally to 100 students.

Conferences & Seminars

Recent Trends in Theoretical Physics

Recent trends in Theoretical Physics, such as symmetries, strong and weak interactions, and many-body problems, were discussed at the second anniversary symposium of the Institute of Mathematical Sciences, Madras, held from January 3 to 9. The symposium was inaugurated by Sri C. Subramaniam, Union Minister for Steel & Industry, and presided over by Prof. L. Rosenfeld of Nordita, Copenhagen (Denmark), who is the second Niels Bohr Visiting Professor at the institute.

In addition to about a dozen local scholars, the participants included these foreign physicists and mathematicians who were in residence at the institute as visiting professors—Prof. H. Stone, Univer-



Prof. L. Rosenfeld, the second Niels Bohr Visiting Professor at the Institute of Mathematical Sciences, Madras, inaugurating the second anniversary symposium at the Institute.

More Seminar News on Page 18

sity of Chicago; Prof. R. Hagedron, CERN, Geneva; Prof. E. C. G. Sudarshan, University of Rochester; Prof. B. Zumino, New York University; Prof. A.T. Bharucha-Reid, Wayne State University; Dr. M. Jacob, SPT, Scalay (France); Dr. L. O'Riada, Dublin Institute for Advanced Study (Ireland); and Dr. F. Mohling, University of Colorado, Boulder (U.S.A.).

Plant Protection Seminar

A seminar on plant microbe-interactions, including methods of plant protection, was held from January 27 to 31 under the auspices of the Centre for Advanced Studies in Mycology and Plant Pathology, Department of Botany, Madras University. Among the 24 participants were Prof. N.A. Krasilnikov, State Director, Institute of Microbiology of the U.S.S.R. Academy of Sciences, Moscow, and Dr. O. G. Shirokov, Senior Research Fellow in the same institute, who had been sent to the Madras centre under the Unesco Expanded Programme of Technical Assistance.

Prof. Krasilnikov read a paper on 'Phytotoxins of Microbia in the Life of Plants'. He said in an interview that the main problem facing botanists in India was the control of the wilt disease in cotton

and the blast diseases in rice caused by certain soil fungi, and observed that the tropical climate in the country favoured the possibility of developing antibiotic micro-organisms to combat and eliminate these diseases.

Refresher Course in Nuclear Science

The Trombay Establishment will organise a refresher course in Nuclear Physics, Electronics, and Nuclear and Radiation Chemistry from the first week of May till the middle of June 1964. The six-week course will be the third of its kind to be held by the Establishment. Unlike in previous years, however, when participation was restricted to teachers from Indian universities only, the third course will admit persons from universities in neighbouring countries as well.

Crystallography

A seminar on "Crystallography and Molecular Structure" was held under the auspices of the Centre of Advanced Studies in Crystallography and Biophysics, Department of Physics, Madras University, from February 17 to 20. Prof. Academician N. V. Belov of the Institute of Crystallography,

Moscow, who has recently taken up his assignment as a visiting professor at the centre under the Unesco Expanded Programme of Technical Assistance, attended the seminar. Among the other participants were Prof. G. N. Ramachandran, Head of the Department of Physics, Madras University; Dr. V. I. Simonov and several other Russian professors.

Summer Institutes in Science Subjects

The University Grants Commission, in collaboration with USAID, will organise this year 16 summer institutes, four in each region, for university and college teachers in specialised fields in Mathematics, Physics, Chemistry and Biology. Each institute will last between five and six weeks. Sixteen top-ranking U.S. scientists will be associated as members of the academic staff of these institutes.

Similarly, 16 summer schools, four in each region, will be organised for secondary school teachers in science subjects, and 32 American specialists working in pairs—a university professor and a high school teacher—will be associated with these summer schools.

UNIVERSITIES IN INDIA

Name of University	Year of Establishment	Type	Enrolment (1962-63)			Vice-Chancellor	Registrar
			Total	Teaching Dep'ts.	Affiliated Colleges		
1	2	3	4	5	6	7	8
*1. Agra University	1927	A	56,384	554	55,830	Shri P.D. Gupta	Shri R.S. Agarwal
*2. Aligarh University	1921	U	5,047	5,047	—	„ B.F.H.B. Tyabji	„ M.M. Siddiqi
*3. Allahabad University	1887	U	11,000	8,462	2,538	Dr. Balbhadra Prasad	„ K.P. Mohiley
*4. Andhra University Waltair	1926	A	32,617	2,756	29,861	„ A.L. Narayan	„ K.V. Gopalswami
*5. Annamalai University Annamalainagar	1929	U	3,182	3,182	—	„ C.P. Ramaswamy Iyer	„ T.D. Meenakshi- sundaram
*6. Banaras Hindu Uni- versity, Varanasi	1916	U	8,410	7,485	925	Justice N.H. Bhagwati	Major S.L. Dar
7. Bhopalpur University	1960	A	19,194	3,335	15,809	Dr. Ramdhari Sinha Dinkar	Shri Amarendra Narayan
*8. Bihar University, Muzaffarpur	1952	A	29,237	6,094	23,143	„ P.L. Srivastava	Dr. K.S. Varma
*9. Bombay University	1857	F	53,902	1,772	52,130	„ R.V. Sathe	Shri T.V. Chidambaram
*10. Burdwan University	1960	A	21,169	508	20,661	Shri B.K. Guha	„ S.M. Chatterjee
*11. Calcutta University	1857	A	1,17,248	9,132	1,08,116	„ B. Malik	„ Gopalchandra Ray Chaudhury
*12. Delhi University	1922	F	25,149	5,518	19,631	Dr. C.D. Deshmukh	„ L.N. Welingkar
*13. Gauhati University	1948	A	34,976	1,999	32,977	„ H.J. Taylor	„ C. Das
*14. Gorakhpur University	1957	A	15,411	3,586	11,825	„ A.C. Chatterji	„ K.J. Majumdar
*15. Gujarat University, Ahmedabad	1949	A	47,208	502	46,706	Shri L.R. Desai	„ K.C. Parikh
16. Indira Kala Sangeet Vishwavidyalaya, Kharigarh.	1956	A	93	93	—	„ P.N. Chinchore	„ B.B. Biswas
*17. Jabalpur University	1957	A	10,600	464	10,136	„ T.C. Shrivastava	„ K.P. Govil
*18. Jadavpur University, Calcutta	1955	U	3,621	3,621	—	Dr. Triguna Sen	„ P.C.V. Malik
*19. Jammu & Kashmir University, Srinagar	1948	A	10,997	355	10,642	Prof. T.M. Advani	„ Abdul Aziz
*20. Jodhpur University	1962	U	4,667	4,507	160	Shri B.N. Jha	„ Sudhindra Kumar
21. Kalyani University	1961	U	470	470	—	Dr. S.N. Das Gupta	Dr. D.C. Sen
22. Kameshwar Singh Darbhanga Sanskrit Vishwavidyalaya, Darbhanga	1960	A	5,216	—	5,216	Shri S.V. Sohoni	...
*23. Karnatak University, Dharwar	1949	A	17,134	2,501	14,633	„ D.C. Pavale	Shri S.S. Wodeyar
*24. Kerala University, Trivandrum	1937	A	56,038	189	55,849	„ Samuel Mathai	„ A.M.N. Chakiar
*25. Kurukshetra University	1956	U	758	758	—	„ Suraj Bhan	„ R.C. Khanna
*26. Lucknow University	1921	U	17,492	11,534	5,958	Dr. A.V. Rao	„ P.C. Mittal
*27. M.S. University of Baroda	1949	U	10,106	10,106	—	„ J.M. Mehta	„ Brij Krishna

UNIVERSITIES IN INDIA (Contd.)

1	2	3	4	5	6	7	8
*28. Madras University	1857	A	64,091	983	63,103	.. A.L. Mudaliar	.. B.M. Thirunaranan
29. Magadh University, Gaya	1962	A	22,329	6,310	16,019	.. K.K. Datta	.. K.P. Saha
*30. Marathwada University, Aurangabad	1958	A	8,848	420	8,428	Shri S.R. Dongerkery	.. M.B. Chitnis
*31. Mysore University	1916	A	40,011	3,898	36,113	Dr. K.L. Shrivali	Dr. K.S. Siddalingaih
*32. Nagpur University	1923	A	32,464	1,545	30,919	Shri P.P. Deo	Shri S.V. Bhagwat
33. North Bengal University, Siliguri	1961	A	7,343	—	7,343	.. B.N. Das Gupta	...
34. Orissa University of Agriculture and Techno- logy, Bhubaneswar	1962	U	982	982	—	.. Mahesh Chandra Pradhan	Shri N.R. Patnaik
*35. Osmania University, Hyderabad	1918	A	25,430	12,660	12,770	Dr. D.S. Reddi	.. B.P.R. Vijhali
*36. Panjab University, Chandigarh	1947	A	63,147	3,573	59,574	.. A.C. Joshi	.. Kirpal Singh
37. Panjab Agricultural University, Ludhiana	1961	U	1,344	1,344	—	Shri P.N. Thapar	.. S.K. Misra
*38. Punjabi University, Patiala	1961	U	3,707	—	3,707	Bhai Jodh Singh	.. Harbans Singh
*39. Patna University	1917	U	10,815	10,815	—	Dr. G. Jacob	.. K.P. Ambastha
*40. Poona University	1949	A	39,536	888	38,648	Mahamahopadhyaya Datto Vaman Poidar	.. W.H. Goley
41. Rabiandra Bharati, Calcutta	1961	A	131	131	—	Shri H. Banerjee	.. B.R. De
*42. Rajasthan University, Jaipur	1947	A	30,649	6,905	23,744	Dr. M.S. Mehta	.. C.L. Singhal
43. Ranchi University	1960	A	19,705	3,915	15,790	Shri Sarangdhar Sinha	Dr. M.P. Guha
*44. Roorkee University	1949	U	1,866	1,866	—	.. G. Pande	Shri V.N. Kak
*45. Sardar Vallabhbhai Vidyapeeth, Vallabh Vidyanagar	1955	A	6,184	588	5,596	.. I.J. Patel	.. H.A. Mistry
*46. Saugar University	1946	A	20,589	2,449	18,140	Justice G.P. Bhutt	Prof. Ishwar Chandra
*47. S.N.D.T. Women's University, Bombay	1951	A	4,333	2,467	1,866	Lady Premila V. Thackersey	Smt. K.H. Bhansali
*48. Sri Venkateswara University, Tirupati	1954	A	9,517	1,135	8,382	Shri S. Govindarajulu	Shri M. Ramanuja Rao Naidu
*49. Shiveji University, Kolhapur	1963	A	—	—	—	Dr. A.G. Pawar	.. M.Y. Vaidya
*50. Udaipur University	1962	U	1,231	1,231	—	.. G.S. Mahajani	Dr. H.N. Mehrotra
*51. U.P. Agricultural University, Pantnagar	1960	U	664	664	—	.. N.K.A. Rao (Acting)	.. N.K.A. Rao
*52. Utkal University, Bhubaneswar	1943	A	17,646	1,245	16,401	.. P. Parija	Shri G.C. Rath
*53. Varanaseya Sanskrit Vishwavidyalaya, Varanasi	1958	A	710	—	710	Shri S.N.M. Tripathi	.. R.N. Misra
*54. Vikram University, Ujjain	1957	A	31,578	2,384	29,194	Dr. G.L. Datta	.. V. Shankaran
*55. Visva-Bharati, Shantiniketan	1951	U	490	490 S.R. Das	.. H.C. Bhattacharya

* Member, Inter-University Board of India

A=Affiliating

U=Unitary

F=Federal

'Nagarjuna Bhawan'

"Nagarjuna Bhawan" is the name given to the proposed Chemistry Department building of Kurukshetra University, the foundation stone of which was laid on December 5, 1963 by Sardar Partap Singh Kairon, Chief Minister of Punjab. Dr. D.S. Kothari, Chairman, UGC, presided over the ceremony.

Nagarjuna was a celebrated Buddhist chemist and a teacher at the University of Nalanda in the 7th century A.D. Hsün Tsang, noted Chinese scholar-traveller who stayed in India from 629 A.D. onwards, paid a very warm tribute to the skill of Nagarjuna as a chemist. It was Nagarjuna who discovered the chemical process of distillation and who first made use of black sulphide of mercury in medicine and industry.

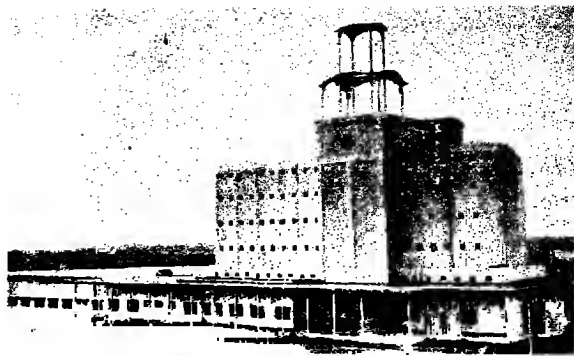
Shantiniketan Ashram Centenary

Shantiniketan Ashram, the seat of Visva Bharati University, celebrated the centenary of its foundation day on December 23, 1963. On this day in 1863, Debendranath Tagore, father of Rabindranath Tagore, selected the spot for offering worship to God. He was so happy over the site that he christened it Shantiniketan (the abode of peace). The Ashram has since grown into the present seat of learning, of which Prime Minister Nehru is the Kulpati (Chancellor).

(Contd. from page 6, col 3)

examinations respectively. In addition, there are a *Shiksha Shastri* (B. Ed.) course, diploma courses in some foreign languages and Music, and a special three-year diploma course in Sanskrit for foreign students. About 40 foreign students are studying Sanskrit at the *Vishwavidyalaya*.

The 21 teaching departments of the *Vishwavidyalaya* provide training in both ancient Indian studies as well as modern subjects. The Saraswati Bhawan Library attached to the *Vishwavidyalaya* has perhaps the biggest collection of ancient manuscripts in the world.



The new library building at the Utkal University campus, Bhubaneswar

NEW COURSES OF STUDY

Aligarh University: A new course in Indian Humanities, consisting mainly of the principal elements of Sanskrit and Islamic cultures, was introduced during the current academic year.

A one-year post-graduate diploma course in Public Administration was also instituted.

A separate Department of Sanskrit is being created by the university in order to encourage the study of Sanskrit and Indian humanities. Dr. Surya Kant, a noted scholar, has been appointed Professor of Sanskrit to head the new department.

Andhra University: An M.Sc. course in Nuclear Chemistry has been introduced at the university colleges.

An M.D. course in Paediatrics, and diploma courses in Dermatology, General Medicine and General Surgery have been started at the Andhra Medical College, Visakhapatnam.

A three-year B.E. degree course has been started in the university colleges and the College of Engineering, Kakinada, for graduates in Science.

M. E. courses in Civil, Mechanical and Electrical Engineering have been started in the university colleges.

An M.A. course in Public Administration has been started in the university colleges.

Annamalai University: A separate Faculty of Agriculture has been instituted.

New Departments of Psychology and Marine Biology have been set up.

The following new courses have been introduced:

A post-graduate course in Chemical Engineering; M.A. (French); B.A. (with Psychology); B.O.L. degree course in Sanskrit; diploma and certificate courses in Sanskrit and Bengali; a certificate course in Audio Visual Education; and a course in Spoken English.

The one-year M. Sc. (Civil, Mechanical and Electrical Engineering) course has been converted into a two-year course.

Banaras University has instituted M. D. courses in Pathology, Social and Preventive Medicine, and Ayurveda; and diploma courses in Anaesthesiology, Laryngology and Otology, Ophthalmic Medicine and Surgery, and Clinical Pathology.

M.Sc. courses in Agricultural Botany, Agricultural Chemistry and Horticulture have been started at the College of Agriculture.

The university proposes to institute from the next academic session M. Sc. courses in Civil Engineering (Hydraulics, Social Mechanics and Structures); Mechanical Engineering (Machine Design);

Electrical Engineering (Power System and Applied Electronics); **Chemical Engineering and Technology**; and **Mining Engineering** (Coal Mining and Metalliferous Mining).

The university hopes to introduce its new three-year degree course in Law from the next academic session.

Bihar University has opened post-graduate classes in Hindi, English, Maithili, Economics, Political Science and Commerce in the C. M. College, Darbhanga, and in Urdu at the L.S. College, Muzaffarpur.

Delhi University has set up the Department of Linguistics during the current academic year. The following courses of study have been recently instituted:

Faculty of Arts & Social Sciences: Diplomas in Modern Persian and Linguistics, and M. A. & B.A. (Hons.) in Bengali.

Faculty of Science: D. Sc. and M. A./M. Sc. in Operational Research.

Faculty of Medical Sciences: Diplomas in Otolaryngology; Obstetrics and Gynaecology; Medical Radio Diagnosis (D. M. R. D.); Medical Therapy (D. M. R. T.); Radiation Medicine; and Ophthalmology.

Faculty of Music & Fine Arts: M. A. in Hindustani Music.

Faculty of Law: D.C.L.

The university proposes to establish a Department of Geology; a Faculty of Physics and Mathematics; a Department of Chinese Studies; and a diploma course in Journalism from the academic year 1964-65.

Gauhati University has established the Department of Zoology with effect from the current academic session.

Jabalpur University introduced the following new courses from the current academic year: M. E. in Civil Engineering with specialisation in Soil Mechanics and Foundation Engineering; Mechanical Engineering with specialisation in Internal Combustion Engineering; Electrical Engineering with specialisation in High Voltage Engineering; Telecommunication Engineering with specialisation in Microwave Technology; Telecommunication Engineering with specialisation in V. F. and Carrier

Telephone Engineering; Electrical Engineering with specialisation in Control System; and Civil Engineering with specialisation in Public Health and Municipal Engineering.

B. E. Sc. (three-year course after B. Sc.).

M. Sc. in Nutrition and Dietetics.

M. V. Sc. in Animal Breeding and Genetics, Obstetrics, Physiology, Biochemistry, and Parasitology.

M. A. in Marathi.

The university is contemplating to start its post-graduate and research department in Physics from the next session.

Karnatak University is going to introduce post-graduate courses in Physiology, Medicine, Obstetrics and Gynaecology, and Thoracic Surgery from the academic year 1964-65.

Kurukshetra University: The Department of Education has been started from the current academic session and an M. Ed. course has been instituted. The number of students admitted to the M. Ed. class is 14, including four girls.

Undergraduate courses in Botany, Zoology and Geography have been introduced.

An optional paper on Translation from English into Hindi has been introduced for M.A. (English) and M.A. (Hindi) students from 1964.

Magadh University: Post-graduate Departments of Political Science, Ancient & Asian Studies, and Sanskrit & Prakrit started functioning with effect from the session 1963-64.

Military Science has been included in the curriculum of the university as an optional subject at the undergraduate stage.

Marathwada University has decided to establish two new departments, one of Physics and the other of English.

Osmania University has introduced a three-year degree course in Civil, Mechanical, Electrical and Telecommunication Engineering for those who have passed the B. Sc. examination, and a 4-year degree course in Engineering for diploma-holders. M. Sc. (Tech.) in Applied Geology and M. E. in Control

Engineering have also been recently introduced.

The university has instituted Ph. D. in Public Administration, M.A. in Linguistics and Psychology; M. Sc. in Nutrition; a three-year diploma course in Business Management; and a two-year diploma course in Music.

The university has prescribed a course in Research Methodology as a pre-condition for registration for Ph. D.

Panjah University has instituted an advanced diploma course in German; a diploma course in Nutrition; and a certificate course in Gandhian Philosophy.

The university has permitted the medical College, Amritsar, to start the following new diploma courses from January 1964: Child Health; Dermatology; Gynaecology and Obstetrics; and Laryngology and Otology.

Punjabi University started post-graduate Departments of Chemistry, Physics, Economics, English, Mathematics and Punjabi, and the Departments of Tibetan Languages (certificate course), Chinese Languages (certificate course), Physical Education, Punjab Historical Studies, and Translation from the academic session 1963-64. The Departments of Economics, English, Mathematics and Punjabi were taken over from the Mahendra College, Patiala.

S. V. Vidyapeeth has opened the Department of Education and the Department of Philosophy-Psychology & Sociology.

Sri Venkateswara: In the S. V. University College, Tirupati, a two-year course in M.Sc. (Home Science) started from November 1963.

The duration of the pre-university (evening) course will be reduced from two years to one year with effect from the next academic year.

Udaipur University: A new course in Soil Science has been started for M.Sc. (Ag.) students at the Rajasthan College of Agriculture, Udaipur, from the academic session 1963-64.

The following new courses are proposed to be started in the university from the academic session

(Contd. on next page)

(Contd. from pre-page)

1964-65 : B.Sc. in Dairy Science and Poultry Science; M.Sc. in Plant Pathology, Animal Husbandry, Entomology and Sheep Husbandry.

Varanaseya Sanskrit Vishwavidyalaya has introduced two-year diploma courses in the Tibetan, Chinese, German, Russian and French languages.

The university has started proficiency courses (evening) in Sanskrit and Tibetan.

With a view to promoting the study of ancient Indian science, art and culture, and encouraging research in them, the university proposes to start the Departments of Yoga, Tantra, Varta (Indian Economics), Rajashtira (Polity), Ancient Indian and Modern Jurisprudence, Shilp-shastra (Architecture), and Indian Astronomy and Indian Vayu Vijnana.

Visva Bharati plans to start degree courses in Dance, Music and Fine Arts. At present two-year certificate and four-year diploma courses are available in these subjects.

Indian Agricultural Research Institute: Two new teaching divisions, one in Soil Physics and the other in Soil Microbiology, providing M.Sc. and Ph. D. degrees, have been established.

ADMISSIONS

Delhi University: From the academic year 1964, admission to the B.A. course will be open to only those candidates who secure at least 40% marks in the higher secondary or an equivalent examination. For admission to the B.A. (Hons.) course, the minimum marks required are 45% in the aggregate or 40% in the aggregate and 50% in the subject for the Honours course.

The Directorate of Correspondence Courses has extended its facilities to persons employed in Indian diplomatic missions abroad. Their examination will, however, take place at centres in India.

The condition of employment has been waived in the case of women students seeking admission to the university's evening colleges from the next academic year.

Medical Education

4½-Year M.B.B.S. Course Approved

The Inter-University Board of India, at its 39th annual meeting held at Varanasi towards the end of December 1963, accepted the proposal of the Union Ministry of Health that the duration of the M.B.B.S. course in all medical colleges be uniformly 4½ years followed by compulsory housemanship for one year which should involve training for three months in Medicine, three months in Surgery, three months in Obstetrics and Gynaecology, and three months in Preventive Medicine. Most of the universities have already adopted the 4½-year course.

It was also decided that where the hospitals attached to the medical college concerned were not large enough, some non-teaching hospitals might be recognised for the purpose of training housemen.

It was agreed that in medical courses 25 per cent marks might be allotted for internal assessment, that there should be an exchange of teachers and research workers between various medical colleges, and that in order to promote national integration medical colleges should reserve a certain percentage of seats for students of other States.

The Board also accepted the proposal of the Ministry of Health that the results of P.U.C., higher secondary and Intermediate Science examinations, the passing of which is necessary for admission to medical and engineering courses, be published by the first week of June to ensure completion of admissions to all medical colleges by the first week of July.

Punjab University has restricted admissions to post-graduate engineering courses to candidates who have passed the B. E. examination or its equivalent with at least 60 per cent marks in the aggregate.

The university has decided that a person who has been registered for the Ph.D. degree with another university shall be allowed to supplicate for the Ph.D. degree of this university if the supervisor of the candidate previously working in that university has joined Punjab University.

Central Institute of Pharmacy Proposed

The Union Ministry of Health proposes to establish a Central Institute of Pharmacy for providing training in higher ranges of Pharmacy, especially in fields which should be useful to the drug industry. A special committee appointed by the Ministry to examine the proposal has fully supported the idea and has emphasised the role of such an institute in training teachers for educational institutions. The committee has *inter alia* recommended that provision should be made for additional 8,000 seats for diploma courses and 1,350 seats for degree courses in Pharmacy in the country.

New Medical Colleges

To ensure a minimum standard of medical education in the country, the Government of India has laid down a uniform procedure for starting new medical colleges in all the States. It has been decided that no new medical colleges, even those approved under the Third Plan, should be started by any State Government during the remaining period of the Plan without the prior consent of the Union Health Ministry. Central assistance will be given only for colleges started with the approval of the Ministry.

Medical Centre at Baroda

WHO and the Gujarat State have started an experiment to develop a strong medical centre at the Medical College, Baroda. The main object is to raise the standard of post-graduate teaching and research. Under this scheme there will be visits to Edinburgh by members of the college, and there may also be student-exchange programmes. At present a team of six visiting professors from Edinburgh is working at the college.

A competitive examination commencing from October 6, 1964 will be held by UPSC for recruitment to IAS, IFS, IPS and various other central services. Last date for receipt of applications is April 27, 1964.

Chemistry in Indian Universities

The fourth report in the series from the review committees appointed by UGC some years ago came out recently under the title *Chemistry in Indian Universities*. The three reports published earlier dealt with Mathematics, Botany and Biochemistry.

The Review Committee on Chemistry was appointed in May 1960 under the chairmanship of Dr. T.R. Seshadri, Head of the Department of Chemistry, Delhi University, with Dr. B.D. Laroia, the then Development Officer, UGC, as its member-secretary. After the retirement of Dr. Laroia from the services of UGC, Dr. D.S. Narayan, Education Officer, acted as the member-secretary.

In the words of Dr. D.S. Kothari, the report emphasises, above everything else, the need for improvement of the courses of study and re-orientation in the methods of research in our universities so as to bring it in line with the trends elsewhere in other countries. The report contains several useful suggestions with regard to the model syllabi, indicating the extent of training to be provided at various levels of university education, introduction of newer disciplines of study, assessment of students' performance, examination pattern and training for research degrees.

Vast Area of Study

Like some other major sciences, Chemistry is in a state of highly advanced development and now covers a vast area of study, which not only necessitates specialisation but also concentrated attention on the essentials for understanding the principles of Chemistry which are capable of being put to large areas.

After giving a brief, but interesting historical sketch of the development of Chemistry in India, the report details the existing facilities available in the country for teaching and research in Chemistry and further probes into the future lines of development. The critical survey of the existing facilities, however, reveals unsatisfactory conditions prevailing both at the undergraduate and post-graduate levels. The weak-

ness lies more prominently in small institutions located far away from university centres of training. In affiliated colleges, generally speaking, departments of Chemistry are poorly equipped and unsatisfactorily staffed, particularly for teaching at the post-graduate level. The committee, therefore, feels that post-graduate teaching in Chemistry should be confined to university departments only, leaving the colleges to take care of undergraduate teaching. The committee strongly recommends the establishment of a few advanced centres for research in Chemistry in those universities where the subject is already well developed.

Model Syllabi

In a separate chapter entitled "Syllabi and Examination System", the committee has laid down model syllabi for the M.Sc. and B.Sc. courses.

Among the other recommendations of the committee are: (i) the ratio between senior and junior teachers should be brought up roughly to 1 : 1; (ii) the teaching load of post-graduate teachers should not be more than 14 hours a week; (iii) Radiochemistry should be intro-

duced as a part of the M.Sc. (Final) course; (iv) 40% of the total marks in the examination should be assigned in sessional tests.

The report contains two very interesting appendices which give detailed information regarding the centres of training and the strength of enrolment at each.

Facts and Figures

According to the information received by the committee, there were 3,500 students studying Chemistry at the M.Sc. level in 1962-63 at 40 different universities. Of these 1,885 were in university departments and 1,615 in affiliated colleges. The highest enrolment was at Agra University (481) distributed between 14 colleges affiliated to it. Jammu & Kashmir University, on the other hand, had the minimum number of M.Sc. students (16).

Similarly, for Ph.D. the total enrolment was 568, of which 481 students were registered with university departments and 87 with affiliated colleges. Lucknow University had the maximum number of candidates for Ph.D. (78). To the report is appended a list of 448 theses accepted during 1955-60 at 23 universities, which shows that during this period Bombay University accepted the highest number of theses (69), followed by Allahabad (63), Madras (45), Lucknow and Poona (31 each), and Delhi (28).

Form IV

1. Place of Publication: New Delhi-1
2. Periodicity of Publication: Once in 2 months.
3. Printer's name: B.D. Laroia.
Nationality: Indian.
Address: Inter-University Board of India, Rouse Avenue, New Delhi-1.
4. Publisher's Name: B.D. Laroia.
Nationality: Indian.
Address: Inter-University Board of India, Rouse Avenue, New Delhi-1.
5. Editor's Name: B.D. Laroia.
Nationality: Indian.
Address: Inter-University Board of India, Rouse Avenue, New Delhi-1.
6. Names and addresses of individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital: Inter-University Board of India.

I, B.D. Laroia, hereby declare that the particulars given above are true to the best of my knowledge and belief.

March 14, 1964.

(Sd.) B.D. Laroia
Signature of Publisher

Govt. Scheme for Hindi Publications

The Union Ministry of Education has revised and finalised the scheme of preparation, translation and publication of books in Hindi in collaboration with publishers. Under the new scheme, publishers may propose books for translation or original writings on science, technology, humanities, general knowledge, classics and children's literature for publication.

The objectives of the scheme are dissemination of scientific and technical knowledge, popularisation of scientific and technical terminology evolved by the Ministry of Education, and enrichment of Hindi by promotion and production of literature in different branches of technical knowledge.

Publishers will be requested to print an edition of at least 3,000 copies of such books as are approved under the scheme, the Government purchasing not more than one-third of the copies so printed at a price to be determined by the Chief Controller of Printing and Stationery.

Handbook of Indian Universities

A new edition of the *Handbook of Indian Universities*, which is periodically published by the Inter-University Board of India, is now at the printing stage. The handbook will run into over a thousand double-column pages, and is expected to be ready in a couple of months' time. The likely price of the publication containing a fairly comprehensive account of the 55 Indian universities, five Indian Institutes of Technology and the various institutions "deemed to be universities", is Rs. 25 per copy. Those interested may place their order with the Secretary, Inter-University Board of India, Rouse Avenue, New Delhi.

Booklet on Foreign Students

Karnatak University has brought out a booklet giving information about the 43 foreign students enrolled with the university. The country-wise list of the students indicates the field of study, local address and permanent home address in respect of each foreign student. The booklet could well serve as a model to other universities in the compilation of similar information.

PUBLICATIONS

Science in Parliament

The Indian Parliamentary and Scientific Committee, an informal organisation which was formed some two years ago to provide a liaison between Parliament and scientific activities in educational institutions in the country, has started an attractive quarterly journal under the title *Science in Parliament*. The first issue came out in 1963 autumn and the second one in winter last year. The Prime Minister in his message hopes "that this (journal) will help not only in giving information about the various aspects of science and modern life but also in creating a scientific temper of mind".

The Inter-University Board is arranging supply of complimentary copies of the first issue of this journal to all institutions teaching science in the country. Any institution not receiving a complimentary copy may write to the Secretary, Inter-University Board of India and ask for the same.

Science Reporter

The inaugural issue of *Science Reporter*, a monthly magazine started by CSIR, came out in January 1964. Highlights of the 48-page publication were popular articles on "Inputs in Indian Science"; "How Quiet is the Sun?"; "New Technique for Mapping Cholera"; "Long Span Space Structures"; and "The Versatile Polymers". Other features included "Science and Humanities" by Shri M. C. Chagla. The new magazine aims at disseminating scientific knowledge in a not-too-technical form.

Indological Studies Digest

Kurukshetra University has undertaken the publication of a digest of indological studies entitled *Practi Jyoti*. It is a half-yearly publication and its annual subscription is Rs. 30. The first issue came out in January this year to synchronise with the 26th International Congress of Orientalists held in New Delhi.

Arrangements are also under way for the publication of old and rare Sanskrit books, and a descriptive catalogue of old and rare manuscripts.

Unesco Publication on World History

A new world history in which comments of member States of Unesco were taken into account reached the publication stage during 1963. The first volume of the projected six-volume work, *Prehistory and the Beginning of Civilization* by Jacques Hawkes and the late Sir Leonard Woolley, appeared simultaneously in the United Kingdom and the United States. The history is the work of an independent international commission of scholars, established by Unesco in 1950.

Hindi Grammar in German

The South Asia Institute of Heidelberg University has brought out an introduction to the Hindi grammar in German. Produced by Prof. Aryendra Sharma and Mr. Hans J. Vermeer, the book opens a direct bridge between Hindi and German, obviating the need to employ a third linguistic medium.

Science Departments' Report

Rajasthan University has published a report of its teaching departments under the Faculty of Science for the period 1962-63. Besides special features of syllabi and teaching, it gives a comprehensive account of the research activities of each department. A staff list and some enrolment and examination statistics are also included.

S. V. Vidyapeeth to Publish Books in Hindi

Since the medium of instruction and examination at S. V. Vidyapeeth is Hindi, with option to use English or Gujarati, the university has undertaken the publication of books on various subjects in the Hindi language. So far it has published seven books in Hindi on the subjects of Chemistry, Physics, Commerce and Sociology.

A.I.F.E.A. Journal

Indian Education, the monthly journal of the All-India Federation of Educational Associations appeared again in December 1963 after a lapse of several months during which its publication was suspended owing to financial difficulties. Edited by Mr. E. W. Franklin, the journal has been revived by a grant from the Asia Foundation.

Sports & N.C.C.

Rail Concession Revived

Following repeated requests of the Inter-University Board, the Railway Board has revived the rail concession for sports teams and athletes travelling to participate in the tournaments conducted by IUB. The concession can be had on the production of the requisite certificate signed by the Secretary, IUB. The Railway Board had earlier revived several rail concessions which had been suspended when the national emergency was declared.

Inter-University Sports Board Meeting

The 24th annual meeting of the Inter-University Sports Board of India will be held on April 24 and 25, 1964 at the Panjab University campus, Chandigarh. Dr. A. C. Joshi, Vice-Chancellor, Panjab University and President of IUSB for the year 1964-65, will preside over the meeting.

All-India Sports Congress

The second All-India Sports Congress will be held at Vigyan Bhavan, New Delhi, from April 2 to 4 under the chairmanship of H.H. the Maharaja of Patiala, President, All-India Council of Sports.

Progress of N.C.C. Scheme Reviewed

Major-General Virendra Singh, Director-General, NCC, reviewing the progress of the NCC scheme at the Varanasi meeting of the Inter-University Board, said that the present strength of the Senior NCC Division was 9.5 lakhs; 326 NCC rifle battalions had been raised and reorganised; 4,000 college and university teachers had undertaken pre-commission training; the Directorate had employed 500 NCC Officers on full-time basis and 1,400 cadets as full-time Instructors and an equal number as part-time Instructors; 50,000 rifles purchased from Britain had been distributed for



Members of the hockey teams of Panjab and Poona Universities who played the finals of the Inter-University Hockey Tournament at Jammu on January 19, with Shri T.M. Advani, Vice-Chancellor, Jammu & Kashmir University. The tournament was won by the Panjab team.

INTER-UNIVERSITY TOURNAMENTS

Results of 15 Inter-University Tournaments were published in the November-December issue of *University News*. The following are results of the remaining tournaments which have since been played:

Tournament	Winner	Runner-up
Hockey (Men)	Panjab	Poona
Hockey (Women)	Punjabi	Gujarat
Boxing	Bombay and Poona shared	Panjab
Cricket	Bombay	Madras
Kho-Kho (Men)	Poona	Nagpur
Kho-Kho (Women)	Vikram	Baroda
Tennis (Men)	Allahabad	Poona
Athletics (Men)	Panjab	Vikram
Athletics (Women)	Vikram	Delhi

use in the training; and UGC had sanctioned money for 1,000 short ranges.

He said the main emphasis in the NCC training was on the educational aspect where special stress was laid on character building, discipline and leadership. The training in technical institutions would in future have a technical bias.

Board's Resolution

The Board adopted the following resolution at the meeting:

- (a) NCC training to post-graduate students be imparted on a voluntary basis,

- (b) Earners and learners be excluded from this programme.
(c) Senior Division NCC Infantry Units be merged with the NCC Rifles.
(d) Seven days' camp be introduced for NCC Rifles.
(e) NCC training for girl students be voluntary.
(f) NCC training be included in the college programme.
(g) Additional training facilities be provided to those students who have not put in the required attendance on NCC parades.

'Varsity Employment Bureaux Seminar

The first all-India seminar on university employment, information and guidance bureaux, held at Varanasi from January 13 to 15, under the chairmanship of Dr. V.K.R.V. Rao, Member, Planning Commission, recommended the setting up of a five-man committee to streamline the entire procedure laid down for the bureaux and, *inter alia*, to look into the proposal of transferring their administrative control to Vice-Chancellors. At present such bureaux are functioning at 16 Indian universities, the first having been set up at Delhi University in 1958.

The seminar suggested that all research studies should be undertaken jointly by the different bureaux. Other recommendations related to appointment of separate vocational guidance officers for affiliated colleges and liaison officers for constituent colleges, undertaking of surveys on part-time employment opportunities for students in the private sector, and preparation of career literature.

Unemployed Graduates

Dr. V. K. R. V. Rao suggested that a new directorate for graduate employment should be created. He disclosed that there were 150,000 unemployed graduates in the country and between 30,000 and 40,000 graduates were added to this number annually.

Dr. Rao said a large number of university graduates did not have the necessary facilities, financial or otherwise, for improving their academic qualifications. For such persons he suggested the award of scholarships on a mass scale.

Student Personnel Services

The U.S. Educational Foundation in India has arranged a series of five seminars at the Universities of Gujarat, Kerala, Patna, Rajasthan and Utkal to acquaint Indian educators with the concept of student personnel services. Five American specialists in the fields of psychology and student services, who are at present serving in lecturing and research capacities at various Indian institutions, have been associated with these seminars. The experts

are: Dr. Graham B. Bell, Osmoia University; Dr. Joseph D. Dameron, Kerala University; Dr. James B. Klee, Allababad University; Dr. Thomas C. Schreck, Baroda University; and Dr. Givens L. Thornton, Central Bureau of Educational and Vocational Guidance, Delhi.

The American concept of student personnel services includes attention to the student's well-rounded development—physical, social, and emotional, as well as intellectual.

Orientalists' Congress

Six hundred and twenty-four Indian delegates and 406 delegates from 46 foreign countries attended the 26th International Congress of Orientalists held in New Delhi from January 4 to 10. More than 800 papers were read at the congress, which was divided into 10 sections. The maximum number of papers related to indology.

Inaugurating the congress, the President of India, Dr. S. Radhakrishnan, called upon the orientalists to contribute effectively to the recovery of the basic unity of mankind and reconciliation of different cultures of the world.

Earlier, in his presidential speech, Prof. Kabir illustrated how throughout history collaboration between scholars from different countries had led to remarkable advances in human knowledge. He said the time had come when, as in the field of natural sciences, contributions of the eastern and western Scholars in the fields of philosophy, literature, language and history must form a common pool of human education and knowledge.

P.M.'S Address

The Prime Minister, Shri Nehru, addressing the delegates, said that the basic problem before the orientalists was to bring about a synthesis between the old and the new. India among the ancient countries, he said, offered a peculiar ground to them for the study of how the ideas of the past had continued until today and influenced the people, because this country had a continuous tradition whereas in other countries there had been a break between the past and the present.

The next triennial Congress of Orientalists will be held in the U.S.A.

GAS PLANTS

STEEL TANKS-LAB FURNITURE

GAS HOLDERS & BURNERS

LAB GAS & WATER TAPS

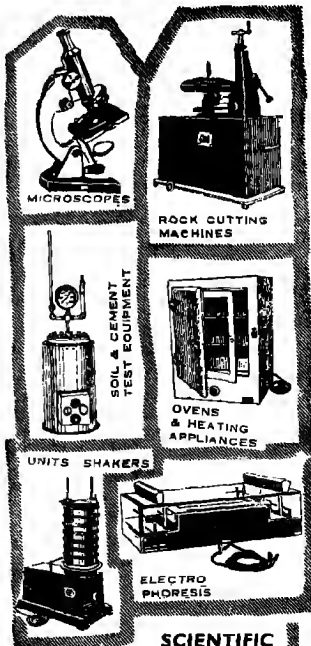
STRUCTURAL WORKS

GAS METERS & BOOSTERS

MANSFIELD

G.P.O. Box No. 124 Cal-1 Phone: 24288(5)
Post Box No. 1929, Madras-1 Phone: 3711
Post Box No. 1026, Delhi-6 Phone: 226161
Dable, GASIFY Calcutta, Madras, Delhi

SEW INSTRUMENTS



SCIENTIFIC
EQUIPMENT WORKS

1777 NICHOLSON ROAD,

DELHI - 6

STERLING SEW 30

Prime Minister Nehru has been re-elected Chancellor of Visva Bharati for the next three years.

Dr. K. L. Shrimali, former Union Education Minister, took over the Vice-Chancellorship of Mysore University from March 16, 1964.

Shri T. C. Shrivastava, a member of the Executive Council of Jabalpur University, has been nominated to perform the functions of the Vice-Chancellor of the university w.e.f. March 5, 1964, following the resignation of Shri V. R. Sen.

Shri P. P. Deo has been elected Vice-Chancellor of Nagpur University w.e.f. January 5, 1964 in place of Col. Justice S. P. Kotval.

Shri Shridhar Vasudev Soloni, I.C.S., took over charge of the office of the Vice-Chancellor of K. S. Darbhanga Sanskrit University on February 7, 1964 from Dr. Umesh Mishra.

Dr. N. K. Anant Rao has been appointed Acting Vice-Chancellor of U.P. Agricultural University, Shri K. A. P. Stevenson having relinquished office.

PERSONAL

Dr. Ramdhari Sinha 'Dinkar' assumed charge of the office of the Vice-Chancellor of Bhagalpur University from January 10, 1964 vice Dr. B.R. Mishra resigned.

Shri Sudhindra Kumar has been appointed the first Registrar of Jodhpur University w.e.f. February 9, 1964.

Shri V. N. Kak assumed charge as the Registrar of Roorkee University from January 1, 1964.

Sbri H. C. Bhattaacharya has assumed charge as the Registrar of Visva Bharati w.e.f. December 15, 1963.

Dr. Kamallesh Ray, Assistant Director, National Register Unit, CSIR, has been appointed Deputy Director in charge of the unit w.e.f. November 22, 1963.

Dr. Husain Ali Bheemji Parpia has been appointed Director, Central

Food Technological Research Institute, Mysore w.e.f. November 4, 1963.

Prof. P. Maheshwari, Head of the Botany Department, Delhi University, has been elected President of the National Academy of Science, India, for 1964.

Dr. N. R. Dhar, Director, Sheila Dhar Institute of Soil Science, Allahabad University; and Prof. S. Ghosh, Head of the Chemistry Department, Jabalpur University, have been elected Vice-Presidents of the National Academy of Science.

Dr. J. Swarbrick, Director, Unesco South Asia Science Co-operation, is shortly leaving India to take up his new assignment at the Unesco headquarters in Paris.

Shri Ashoke Kumar Mustafy, Officer on Special Duty, CSIR Secretariat, has taken over as Secretary, CSIR, w.e.f. February 19, 1964 vice Shri A.J. Kidwai who has proceeded to the U.K. as Educational and Scientific Adviser to the Indian High Commission there.

The ENGLISH LANGUAGE BOOK SOCIETY

&

Leading British Publishers

ANNOUNCE

Their **LOW-PRICED TEXTBOOK** Series in ►

Each title carries its distinctive coloured label

(Dark Red 21s./Rs. 16.80; Green 15s./Rs. 12;
Orange 12s./Rs. 9.60 and Blue 9s./Rs. 7.20)

AGRICULTURE
BUSINESS ADMINISTRATION
CHEMISTRY
ECONOMICS
ENGINEERING
MATHEMATICS
PHYSICS

The use of special measures has made the reduction possible, but in every case the original text and diagrams have been retained.

Please ask your bookseller to show you his stock of the series.

Watch also for announcements of other series which the Society is planning for the non-specialist.

**ARE THESE
SUPPOSED
TO BE MY
PEAK
LEARNING
YEARS ?**



Very likely ! You may have the capacity to learn later in life, but chances are that you will neither have the time nor the facilities that you have at college now.

You can improve your studies, and at the same time cut down on expenses by investing in

*Eastern
Economy
Editions*

3E text books are reprints of American books recommended by Indian Universities, available at one-third the price of the American Editions.

EVERY STUDENT CAN AFFORD 3E TEXT BOOKS

— You can't afford not to !

ASK YOUR BOOK STORE ABOUT THEM TODAY

Prentice-Hall of India (Private) Ltd.

M-97 AGGARWAL BUILDINGS CONNAUGHT CIRCUS, NEW DELHI

We talk about Five Year Plans and development schemes. I am quite convinced in my mind that the first plan is universal education. Everything else, whether it is industry or agriculture... will grow adequately if there is the background of mass education and then, of course, specialised education, higher up.—The late Shri Jawaharlal Nehru.

End of an Epoch THE ARCHITECT OF MODERN INDIA PASSES AWAY

"In bravery he cannot be surpassed. Who can excel him in the love of country? He is rash and impetuous, say some. This quality is an additional qualification at the present moment. And if he has the dash and the rashness of a warrior, he also has the prudence of a statesman. He is undoubtedly an extremist thinking far ahead of his surroundings. But he is humble enough and practical enough not to force the pace to the breaking point. He is pure as crystal, he is truthful beyond suspicion. He is a knight *san pour et sans reproche*."

—Mahatma Gandhi
(1929)



"As a fighter for freedom, he was illustrious; as a maker of modern India, his services were unparalleled. His life and work have had a profound influence on our mental make-up, social structure and intellectual development."

—Dr. S. Radhakrishnan
in his broadcast
to the nation.

"He moulded India's thoughts and aspirations and symbolised the heart of the country, the heart of the millions of Indians. In his person, he embodied their ideals, their yearnings and struggles. He gave them faith and strength and lighted up new paths."

—Shri G.L. Nanda
in the Lok Sabha

"The ship of State has lost its captain, but the ship must sail, however turbulent the seas. Whoever is the new captain, he can steer the ship by the light that Nehru's name and memory will always shed and his spirit will always be there to guide the country he loved so greatly, to protect the people who gave him a devotion and dedication which few leaders have received in any period of history or in any part of the world."

—Shri M.G. Chagla in the Rajya Sabha

Greater Central Participation in Educational Development Envisaged

The State Education Ministers who met in New Delhi in the last week of April under the chairmanship of Shri M. C. Chagla, Union Education Minister, generally agreed that the Centre should assume greater responsibility to improve the quality of education.

In this context, it was emphasised that more and more Centrally-sponsored projects should be taken up and that the Centre should earmark block grants for these projects.

It was also urged that in accordance with the recommendations of the Kher Committee, the Central Government should spend 10 per cent of its revenue and the States not less than 20 per cent. At present the Central Government spends about 4 per cent and a few States 20 per cent.

This was perhaps the first time that the State Education Ministers' Conference adopted no formal resolutions, but stressed that immediate steps should be taken to realise the objectives on which there was broad agreement.

Higher Education

The Conference agreed that all efforts should be made to improve and expand higher education, especially at the post-graduate and research levels and in the scientific and technical fields. It also welcomed the idea of starting schools of post-graduate studies which, in course of time, could be developed into new universities.

Earlier, in his address to the State Ministers, Shri Chagla expressed himself against the opening of more universities, and instead suggested the strengthening and expansion of existing universities. On this issue, however, the Conference did not record an unanimous view.

Secondary Education

The Ministers agreed that all States should take steps to achieve a broad measure of uniformity in the content of secondary education. They also suggested that the entire education at the secondary stage should be completed in the schools and that the pre-university courses started by various universities should be transferred to the schools as soon as possible.

Particular emphasis was also laid on the need for diversification of education and opening of more and more junior technical schools and other vocational institutions. Earlier, speaking on this subject, Shri Chagla revealed that in India only 12 per cent of the students who went to secondary schools took to vocational courses, while in some other countries the percentage of such students was between 60 and 70.

As regards primary education, the consensus was that the target of achieving full enrolment in the age group 6-11 should be attained by the end of the fourth Plan period, with particular emphasis on the enrolment of girls and students from rural areas.

Reallocation of Work in Education Ministry

The final phase of rationalisation in the internal organisation of the Union Ministry of Education was completed on April 9, when the Ministry started functioning mainly through five bureaux dealing separately with school education; higher education; language, literature and fine arts; scholarships; and planning and ancillary services.

Earlier, as part of his reorganisation plan, the new Education Minister had wound up a large number of superfluous committees and advisory bodies and initiated action to abolish the division of his Ministry into the Departments of Education and Science.

Study Group on Place of English in Schools

A five-member study group has been set up under the chairmanship of Prof. V. K. Gokak of the Central Institute of English, Hyderabad, to examine the place of English in the school curriculum in the light of the impending changeover from English to the regional languages at the university level. The group is expected to submit its report within six months.

Students' Information Centre, Delhi

The foundations of what might develop into an important liaison and information agency for foreign students coming to India and Indian students going abroad were laid recently in Delhi by the setting up of a Students' Information Centre by a group of educationists, journalists and some prominent citizens of Delhi.

The centre, a non-profit organisation, will provide facilities and programmes which will not only benefit individual students but will also be conducive to the advancement of international understanding and co-operation. Its information bureau started functioning in December 1963. The work of collecting books to build up a library for the use of Indian and foreign students has begun. The first issue of the centre's bimonthly magazine containing articles and information of interest to both Indian and foreign students has just come out. The centre plans to organise orientation courses and seminars for the benefit of both Indian and foreign students. There is also a scheme to set up a language laboratory for imparting knowledge of spoken Hindi to visiting students.

'Welcome Service'

A particularly interesting feature of the Centre's activities will be its "welcome service" for foreign students arriving in India. To start with, the service will be provided in Delhi. A list of about 20 families who could provide temporary hospitality to foreign students has been prepared.

Chairs in Comparative Religion

Eleven universities have been selected by UGC for starting chairs in Comparative Religion (Ethics and Moral Philosophy) with special reference to Indian thought and contribution. The universities are: Allahabad, Annamalai, Bombay, Calcutta, Kurukshetra, Madras, Osmania, Rajasthan, Poona, and Visva-Bharati. The chair in Madras University will be named after Swami Vivekananda.

Grants for Textbook Libraries

A new scheme to assist colleges in setting up textbook libraries has been launched by the University Grants Commission. Under this scheme, UGC will give a grant of Rs. 10,000 to a college providing undergraduate education and Rs. 15,000 to a college conducting post-graduate courses on a cent per cent basis during the current Plan period.

In the first instance, about 500 colleges with enrolments exceeding 500 will be provided assistance; later, the scheme may be extended to other college also.

Library Grants for Teachers

As in the past three years, Marathwada University has again offered this year Rs. 100 to every teacher in the university departments and affiliated colleges, whose salary is below Rs. 500, for the development of his personal library on the condition that he contributes an equal amount on his own.

C.S.I.R. Fellowships and Grants

The number of fellowships offered by CSIR to young scientists in universities, national laboratories and other research institutions increased from 89 in 1958 to 1,745 in 1963.

Scientists retiring from university departments and national laboratories, who wish to pursue research after superannuation, are assisted under a separate scheme. Forty-four retired scientists were provided grants for research in their respective fields in 1963.

Contributory Health Service in Universities

A contributory health service scheme for students and staff in universities and colleges, on the lines of the Central Government scheme for its employees, is likely to be introduced in the near future. The University Grants Commission has appointed an eight-member committee under the chairmanship of Dr. A. L. Mudaliar, Vice-Chancellor, Madras University, to examine the proposal in detail.

The committee is likely to submit its report within six months.

SIX NEW APPOINTMENTS OF V.Cs.

Six new appointments of Vice-Chancellors have been announced in the month of May.

Dr. D.S. Reddi has been re-appointed Vice-Chancellor of Osmania University for a further period of five years w.e.f. April 30, 1964. He has been in this post since November 1957.

Dr C.S. Patel, until recently Pro-Vice-Chancellor of the M.S. University of Baroda, has been appointed Vice-Chancellor of the university w.e.f. April 30, 1964 in place of Dr. J.M. Mehta.

Dr. K.C. Naik, Agricultural Adviser to the American Embassy in New Delhi, has been appointed Vice-Chancellor of the new university of Agricultural Sciences being set up in Mysore.

Appointments of the first Vice-Chancellors of the three new universities in Madhya Pradesh to start functioning from the next academic session in July were also announced recently.

Dr. Baburam Saxena, formerly of Allahabad University, will take over as Vice-Chancellor of Ravi Sankar University at Raipur. The Vice-Chancellorship of Indore University goes to Shri H.S. Kamath, who recently retired as Chief Secretary to the Madhya Pradesh Government. Shri S.S. Bhandarkar has been appointed Vice-Chancellor of Jiwaji University at Gwalior.

★

It is not the humanist's ignorance of science or the scientist's ignorance of the humanities which is important, but their common ignorance of the society that they are living in, and of their responsibilities as citizens. It is not the humanist's inability to read a textbook in physics or the physicist's inability to read a textbook in literary criticism, but the inability of both of them to read the morning paper with the kind of insight which is demanded of educated citizens.

—H. NORTHROP FRYE

Assistance to Teachers for Research. Ninety-one teachers in humanities have been selected for awards, varying between Rs. 200 and Rs. 2,000, under the UGC scheme of financial assistance to teachers for research work.

\$167,000 Research Grant

The Department of Zoology, Rajasthan University has received a grant of \$ 167,000 from the Ford Foundation. The grant will be utilised to provide facilities for research in Reproductive Physiology.

Rockefeller Grants

The Rockefeller Foundation recently announced that for the year 1964 they had budgeted \$ 170,000 for Indian co-operative programmes in medical and natural sciences and \$260,000 for agricultural programmes.

Kalinga Prize, 1963

Shri Jagjit Singh, Director of Traffic-Transport, Union Ministry of Railways, is the 12th winner of the International Kalinga Prize of £1,000 for the popularization of science. The prize is awarded by an international jury.

The first Asian to get the Prize, Shri Jagjit Singh devoted himself to the improvement of the understanding of the fundamental theories of cosmogony, Einstein's concepts of relativity and space-time astrophysical theories. He is the author of *Mathematical Ideas, Their Nature and Daily Use* (1959) and *Great Ideas and Theories of Modern Cosmogony Developed in the Past Half Century* (1961).

S. S. Bhatnagar Memorial Award

Shri H. N. Sethna, Director of the Chemical Group at Trombay, and Prof. M.G.K. Menon, Dean of the Faculty of Physics at the Tata Institute of Fundamental Research, are among the recipients of the Shanti Swarup Bhatnagar Memorial Award for Scientific Research.

The awards, of Rs. 10,000 each, were announced last month by the Governing Body of CSIR. Shri Sethna received this recognition for his work in engineering, and Prof. Menon for his work in Physical Sciences.

American Studies Research Centre Inaugurated

The American Studies Research Centre, sponsored by the United States Educational Foundation in India, was formally inaugurated in Hyderabad in the new library buildings of Osmania University at a special convention held from April 1 to 4.

Shri M. C. Chagla, Union Minister for Education, addressing the final session of the inauguration convention on April 4, stressed the need for co-operation and mutual appreciation in the fields of scholarship and culture between India and the United States. He observed that "the greatest similarity today between our two countries is our belief in democratic values", and added that American History should be studied in India because there was a great deal of similarity between the history of the two countries.

Shri Chagla stated that the one great function of the research centre should be "to think of things which are more permanent, more beautiful, more enduring than the passing phases of politics". He added that the similarity of institutions both in India and in the United States, and the bond which these institutions created was something which did not exist in the case of the other countries.

Bowles' Message

Mr. Chester Bowles, United States Ambassador in India, who was to have attended the inauguration function but was away in Washington at the time, in his message to the centre observed that in the long run the outcome of Indo-American relations would depend upon widespread public understanding of each other's history, culture, economics and politics.

Dr. D. S. Reddi, Vice-Chancellor, Osmania University, presided over the convention, and Dr. Olive I. Reddick, Director, USEFI, gave the vote of thanks.

The research centre aims at promoting the study of American subjects in Indian universities and providing research facilities for Indian scholars in these fields. At present 26 Indian universities are offering facilities for the study of

American Literature and 28 for the study of American History.

The centre has been temporarily housed in the Osmania University library until the completion of its own buildings, for which Osmania University has made available five acres of land on its campus.

The formal inauguration was followed by the first Indo-American History Congress and an American Literature Conference held from April 5 to 17. Indian teachers of American History and American Literature in Indian universities and colleges, who are presently teaching these subjects or who have studied them in the United States, were invited to attend the convention and the seminars.

Canadian Scholars in Asian Studies

In connection with Unesco's major project on the mutual appreciation of Eastern and Western cultural values, the Canadian National Commission for Unesco plans to publish a bibliographical directory of Canadian scholars concerned with Asian and African studies. The editor of the directory is Prof. W.A.C.H. Dobson of the University of Toronto.

Royal Society Professors for Indian Universities

Prof. Graham Higman, Waynflete Professor of Pure Mathematics at Oxford University; and Col. H. E. Shortt, formerly Professor of Medical Protozoology at London University, are the two visiting professors appointed by the Royal Society and Leverhulme Trust for the year 1964-65 under its scheme to send two British professors each year to India. Prof. Higman, who was Inspector-General of Civil Hospitals and Prisons in Assam from 1941 to 1944, will be the visiting professor at Panjab University from October this year until March 1965; Col. Shortt will be at Banarus Hindu University for the same period.

Osmania Confers I.L.D. on Iraqi President

The honorary degree of Doctor of Laws was conferred on Field Marshal Abdul Salam Arif, President of the Republic of Iraq, by the Chancellor of Osmania University, General S.M. Shrinagesh, at a special convocation held on March 19.



Four university registrars who are on a two-month study tour of the U.S.A. From l. to r.—Shri Harbans Singh, Punjabi University; Shri P.C.V. Malik, Jadavpur University; Shri T.D. Meenakshisundaram, Annamalai University; and, Shri K.C. Parikh, Gujarat University.

Seminar on Teaching of Chemistry

A seminar on the teaching of Chemistry was held at Delhi University from May 4 to 6. Organised by the teachers of the university department of Chemistry and some local colleges, the seminar was inaugurated by Dr. T. R. Seshadri, head of the department.

Among the invitees who participated in the seminar were Dr. Orval Ury of USAID; Dr. B. D. Loroia of the Inter-University Board; Dr. V. Ramakrishna of IIT, Delhi; and Dr. M. S. Bains of Panjab University.

The major issues discussed were: Audio-visual aids and Chemistry teaching; Chemistry syllabus for B.Sc. students; and new approaches to the teaching of Chemistry.

Discussions on Chemistry syllabus revealed general agreement on the following points:

(a) The introductory course in Chemistry should be based on broad fundamentals and the teaching of Chemistry in separate branches should come at the end of the first year or even later.

(b) The factual content of present topics should be reduced and more topics of everyday interest should be added to the syllabus.

(c) The accuracy of concepts should not be lost sight of at the introductory stage. It was felt that attempts at simplified presentations of concepts often introduced inaccurate statements.

(d) Older and out-of-date texts on Chemistry should be periodically weeded out from libraries.

Radiation Chemistry

A symposium on "Recent Developments in Nuclear and Radiation Chemistry" was organised by the Department of Atomic Energy in Bombay from March 16 to 19. About 133 scientists participated in the seminar and 75 papers were presented on Fission and Radiation Chemistry, Radiation Effects in Solids, Radioactivation and Radiochemical Analysis, Radioisotopes, and the Chemistry of Actinide and Lanthanide Elements. The report of the symposium is expected to be published shortly.

16 Summer Institutes for Science Teachers

Dr. D.S. Kothari, Chairman, UGC, inaugurated on February 10 the five-day orientation seminar for the academic staff of the proposed 16 summer institutes to be held in June-July this year. Twenty-five university teachers and other experts who participated in the seminar, discussed detailed academic and administrative programmes for the summer institutes, which are being organised by UGC in co-operation with the Ohio State University Contract Team of USAID.

The 16 institutes will be held in Biology, Physics, Chemistry and Mathematics—four in each subject. The universities where these institutes will be organised are—Biology: Aligarh, Banaras, Annamalai and Kerala Universities; Chemistry: Jodhpur, Osmania, Panjab and S.V. Vidyapeeth; Mathematics: Delhi, Gujarat, Madras and Patna; and Physics: Bombay, North Bengal, Saugor and Sri Venkateswara.

Sixteen American scientists will be associated with the institutes as members of their academic staff, and each institute will enroll 50 college teachers.

Summer Schools

Similarly, 16 summer schools, four in each region, are being organised for secondary school teachers in science subjects, and 32 American specialists working in pairs—a university professor and a high school teacher—will be associated with these summer schools.

Seminar on Vedas

A Sanskrit seminar on the Vedas was held at Sri Venkateswara University from February 8 to 10. Maharshi Daivavara Sarma of Gokarn, Dr. C.S. Venkateswaran, Agnihotram Ramanuja Tatacarya, Dr. B.R. Sharma, and Pandita Raja D.T. Tatacharya presided over the sessions of the seminar. In all 23 papers were presented by various scholars. An exhibition consisting of charts, maps, manuscripts and books relating to the Vedic literature was also held on the occasion.

Solid State Physics

Inaugurating the symposium on Solid State Physics at the National Physical Laboratory, New Delhi, on April 8 Shri M.C. Chagla, Union Minister of Education said although applied science had an immediate importance in the context of the economic problems facing the country, there could be no applied science without pure science. He pointed out that out of 60,000 solid state physicists in the world, England alone had 6,000 of them at the Ph.D. level. The high proportion of scientists working in the field testified to the importance of the subject.

The symposium, lectures and training course, which lasted till April 18, were attended by about 250 scientists from all over the country.

Prof. D.S. Kothari, Chairman, UGC, delivered the first lecture on "Some Basic Concepts in Physics".

Seminar on Theoretical Physics

The Tata Institute of Fundamental Research will hold its fourth summer school in Theoretical Physics in Bangalore from June 1 to 20, 1964. Lectures will be given by Prof. F.E. Low, on "Recent Trends Field Theory", and by Prof. D. Amati on "Topics of High Energy Physics". The scope of the summer school will be confined to recent developments in the areas of Theoretical Physics concerned with the character of elementary particles and their interactions.

Nuclear Spectroscopy

With a view to bringing together the large number of young physicists engaged in researches in the field of Low Energy Physics, the Tata Institute of Fundamental Sciences is organising a summer schools in Nuclear Spectroscopy in Bangalore from May 21 to June 11. Prof. B.R. Mottelson will give a series of lectures on "Nuclear Coupling Schemes and Collective Motion", while Prof. I. Talmi will speak on "Shell Model Calculations of Nuclear Energies" and Prof. C.A. Levinson on "Hartree-Fock Methods in Nuclear Structure Theory".

Campus News

Tagore Centenary Theatre

Of all the new buildings being constructed at the Osmania University campus under current development plans, the Tagore Centenary Theatre will be a most striking departure from traditional architecture. Located on a slight promontory across the Landscape Gardens, opposite the new library building, the will seat 1,200 persons in a stair-step arrangement.

Though it is designed primarily for plays, a projection room will make it equally suitable for film screenings. A large foyer downstairs will provide a showplace for exhibitions.

New Delhi University

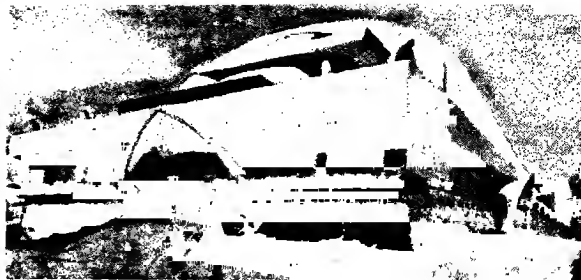
Legislation for the setting up of a second university in Delhi is expected to be introduced in the next session of Parliament. Replying to questions in the Lok Sabha on April 8, Shri M. C. Chagla, Union Education Minister said the Government was convinced of the need to have another university in the Capital in the interest of administrative efficiency.

Dismissing the argument put forward by a Member that Delhi University with 28,000 students on its rolls was in no worse position compared to Calcutta University with 130,000 students, Shri Chagla said Delhi being the Capital of India "should be a model for the rest of India".

meanwhile, Some 1,500 additional seats are being provided in Delhi colleges this year. About one-third of the additional seats will be provided in the three new colleges expected to be opened within a few months. All the six campus colleges will take 50 to 100 more students each. The rest of the seats will be made available in other colleges.

Gandhi Bhawans

Ten Indian universities have either constructed or are going ahead with the schemes to establish Gandhi Bhawans at their campuses. The universities are : Allahabad, Karnatak, Mysore, Nagpur, Rajasthan, Kerala, Jammu & Kashmir, Delhi, Punjab and Jadavpur.



An artist's impression of how the Tagore Centenary Theatre at Osmania University would look like when completed.

NEW COURSES OF STUDY

Agra University : An *ad hoc* committee has been appointed to draft courses for the M.A. examinations in Economics and Public Administration (including Business Management) to be instituted at the Institute of Social Sciences, Agra.

Girl students are now being permitted to offer Home Science for the B.Sc. examination of the university.

Annamalai University has recently introduced diploma courses in Hindi and German, and a certificate course in Hindi.

Aligarh Muslim University : It is proposed to institute diploma courses in Journalism and Translation and a post-M.A. diploma course in English Language from the next academic session. Steps are also being taken to introduce courses in Comparative Literature and Linguistics at the post-graduate level.

A proposal for the introduction of a course in Drilling Engineering in the Department of Geology is also being considered.

Banaras Hindu University has been selected by UGC for locating a centre for advanced studies and research in Philosophy. The centre is expected to start functioning from July 1964.

Burdwan University has opened post-graduate classes in Commerce this year.

The university has decided to introduce a four-year degree course in Textile Technology at the College of Textile Technology, Serampore, Hooghly.

Jadavpur University : A four-year degree course in Pharmacy has been instituted with effect from the session 1963-64. Students who have passed the higher secondary examination with Mathematics or Biology or the diploma course in Pharmacy are eligible for admission.

The one-year Master's degree courses in Mechanical, Electrical, Civil, Chemical and Telecommunication Engineering and Food Technology have been converted into two-year courses.

The university has drawn up the syllabus for a three-year degree course in Home Science, which is expected to be introduced shortly.

Jodhpur University : Diploma courses in Labour Laws and Criminology are proposed to be started from the next academic year. A laboratory for work on "Criminology and Forensic Sciences" will be established under the Department of Sociology.

Karnatak University : A post-graduate diploma in Epigraphy will be introduced from the academic year 1964-65.

Marathwada University has decided to establish new Departments of Physics and English during the year 1964-65.

M.S. University of Baroda has instituted a Master's degree course in Law; a post-graduate diploma course in Taxation Laws and Practice; and a certificate course in Russian.

The university has decided to switch over to the five-year integrated course in Civil, Mechanical and Electrical Engineering from the 1964-65 session.

It has been decided to start post-graduate courses in Applied Geology and Microbiology from the next session.

Approval has been received for the starting of a degree course in Metallurgy and post-diploma courses in Automobile Engineering and Air-Conditioning & Refrigeration.

Punjab University : A three-year degree course in Engineering for persons who have passed the diploma course in Engineering is being introduced.

A post-graduate diploma course in Library Science is to be instituted shortly.

Shriji University is going to start post-graduate courses in Chemistry, Physics, Botany and Zoology from the 1964-65 session.

Sri Venkateswara University has granted permission to the Government College of Engineering, Anantpur, to start three-year degree courses in Engineering for B.Sc. degree-holders with effect from the academic year 1964-65.

The Government Arts College, Anantpur, has been permitted to start evening courses leading to the B.A. degree in certain combinations of subjects with effect from the academic year 1964-65. This will be the second affiliated college of the university to start an evening course at the degree level.

Varanaseya Sanskrit Vishwavidyalaya : Arrangements are being made to start the Departments of Yoga Tantra and Ayurveda from July 1964.

NEW COLLEGES AND AFFILIATIONS

Bihar University has granted affiliation to the Teachers Training College, Turki (offering diploma in Education) for the year 1963-64.

Delhi University : Several private Trusts, besides the local State authorities, have offered to start new colleges in Delhi to cope with the increased admissions. At least three new colleges are expected to be started this year.

Gauhati University : Provisional affiliation has been granted to 35 new colleges during the academic year 1963-64. The total number of colleges affiliated to the university now stands at 79.

Jabalpur University : Affiliation has been granted to the Government Polytechnic, Jabalpur, in respect of the B.Sc. course.

Karnatak University proposes to start the following six colleges from the academic year 1964-65 :—L.V.D. College of Commerce, Raichur; Arts & Science College, Honavar; Arts & Science College, Ilkal; Arts & Science College, Hungund; K.L.E.'s Medical College, Belgaum; and H.K.E. Society's Medical College, Gulbarga.

Magadh University has granted affiliation to the Mahanth Madhusudan College, Birkram (Patna), and the Shreedent College, Mehandia, Arwal (Gaya), up to degree standard in the Faculty of Arts with effect from the session 1963-64.

Marathwada University : During the academic year 1963-64, four new colleges came into existence, two at Aurangabad and two at Nanded.

Mysore University : Eighteen new colleges were affiliated by the university during 1963-64. This raises the total number of colleges affiliated to Mysore University from 49 to 67.

Rajasthan University : Provisional permission has been granted to the Malaviya Regional Engineering College for starting first and second year B.E. courses in Mechanical and Electrical Engineering. The college is expected to shift from Pilani to Jaipur in July 1964.

S.V. Vidyapeeth : A Law College is proposed to be started from June 1964 at Anand.

ADMISSIONS

Udaipur University : Candidates passing the Pre-professional (Ag.)

examination will be eligible for admission to the B.V.Sc. & A.H. course.

Punjab University has decided that a person who has passed the B.Com. examination with 45 per cent marks in Economics shall be eligible to join the M.A. course and other such courses to which a B.A. with Economics is eligible.

EXAMINATIONS

Delhi University : From the next academic year 25% marks will be reserved for internal assessment based on periodical tests and tutorial/perceptorial work in the case of candidates preparing for the B.A., B.A. (Hons.), B.Sc., B.Sc. (Hons.), M.A. except languages, Philosophy, Psychology and Economics, M.Com. and M.Sc. examinations.

Kurukshetra University : An examination at the end of each year for the three-year degree course has been introduced from 1963-64.

The two-year pre-medical course has been split up in two parts, with an examination at the end of each year. This will take effect from the admission of 1964.

Marathwada University has decided to hold the third M.B.B.S. examination thrice a year, viz. in the months of January, May and September every year during the period of the national emergency.

Osmania University has abolished third division in M.A., M.Sc. and M.Com. with effect from the 1964 examinations. The university has also decided to abolish the inclusion of class tests marks for B.A., B.Sc., and B.Com. examinations.

S.V. Vidyapeeth has decided to split up the M.A. and M.Sc. examinations in Mathematics and Statistics in two parts, namely Part-I examination at the end of the first year and the final examination at the end of the second year. A similar arrangement is being followed in respect of the M.Sc. examination in Chemistry and Botany.

Udaipur University has made it obligatory for students to obtain 25% marks at internal examinations to qualify for appearing in the university examinations.

Science Bibliography

Scientists all over the country have been feeling the need for a periodical bibliographic publication which should mirror the scientific output of the country. To meet this demand, the Indian National Scientific Documentation Centre has brought out a pilot fascicle of the *Indian Current Science Bibliography*. The pilot issue (Jan. 1964) indexes 845 articles, including 95 published by Indian scientists in foreign periodicals, 19 theses, 15 reports and other *ad hoc* publications, 235 patents and 30 standard specifications. It is intended to bring out this publication ultimately as an abstracting service.

It is estimated that in the field of pure and applied sciences, 450 periodicals, 2,000 patents, 300 standard specifications, 500 reports, monographs and other *ad hoc* publications are published in India every year. Besides, a number of papers are presented in conferences, and symposia every year and many articles are published by Indian scientists in foreign periodicals. All this will add up to about 15,000 scientific papers every year.

Govt. Expenditure on Scientific Research

Government expenditure on scientific research in India increased from Rs. 122 millions in 1952-53 to Rs. 469 millions in 1961-62. Agricultural and veterinary sciences accounted for 42 per cent of the total in 1952-53 and for 30 per cent in 1961-62.

The Atomic Energy Establishment and CSIR together accounted for 36 per cent and the Railways and Defence for 5 per cent of the total expenditure in 1961-62.

The proportion of research expenditure to total Government expenditure which was 1.0 per cent in 1952-53 increased to 1.32 per cent in 1961-62. The research expenditure per scientist in India is Rs. 16,800 as compared to Rs. 53,420 and Rs. 172,820 in the U.K. and U.S.A. respectively.

C.S.I.R. Research Centres for Universities

The Council of Scientific & Industrial Research proposes to establish some research centres at various universities in collaboration with UGC. These centres would be provided grants by CSIR and scientific personnel from the national laboratories.

The decision to this effect was taken by the Governing Body of CSIR some time back while considering ways and means to promote collaboration between universities and national laboratories and to develop research potential of university science departments.

The number of research schemes sponsored by CSIR in various universities and research laboratories increased from 321 in 1958 to 518 in 1963.

So far 16 national laboratories have been recognised by 19 different universities for post-graduate study and research.

Science Through Hindi

An advisory committee of the Hindi Unit of CSIR for popularising Science through Hindi medium has been constituted with Dr. R. C. Mahotra, Dean, Faculty of Science, Rajasthan University, as chairman. The members of the committee include Professors Gurbaksh Singh and Gopal Tripathi of Banaras Hindu University; Professor L. S. Kothari, Delhi University; and Shri Jagjit Singh, the Kalaga Prize winner for 1963.

GAS PLANTS

STEEL TANKS-LAB FURNITURE

GASHOLDERS & BURNERS

LAB GAS & WATER TAPS

STRUCTURAL WORKS

GAS METERS & BOOSTERS

MANSFIELD

G.P.O. Box No. 124 Cal-1 Phone: 82502(3)
Post Box No. 1929, Madras-1 Phone: 21352
Post Box No. 1099, Delhi-6 Phone: 21214

Cable: GANIFY Calcutta, Madras, Delhi

Medical Admissions Exceed Plan Target

Over ten thousand students were admitted last year in the 79 medical colleges of the country as against the third Plan target of 8,000 admissions and 75 colleges. This was stated by the Union Health Minister, Dr. Sushila Nayar, in the Lok Sabha on April 2.

Endocrinology Society Inaugurated

Dr. C. S. Patel, President, Medical Council of India, inaugurating the Indian Society of Endocrinology at the College of Medical Sciences, BHU, on March 31, 1964, expressed the hope that the society would enable the various workers in the field to share their knowledge and discuss their difficulties and work in harmony for the betterment of mankind.

The university has also submitted a scheme to UGC for the establishment of an Institute of Endocrinology at the College of Medical Sciences, Varanasi, for post-graduate research. The institute, which will be the first of its kind in South East Asia, will be attached to a hundred-bed hospital for patients of endocrine disorders.

Post-graduate Training in Delhi Hospitals

The Union Ministry of Health has allowed two Government hospitals in New Delhi—Safdarjung and Willingdon Hospitals—to function as teaching institutions for specialised post-graduate training in Medicine and Surgery as prescribed by Delhi University. The step has been taken to provide post-graduate training facilities for a larger number of students.

Medical Terminology in Hindi

The Commission for Scientific and Technical Terminology, set up by the Government of India for evolving terms in Indian languages for scientific and technical subjects, will organise a seminar on medical terminology in Bangalore from June 1 to 27.

Medical Colleges in India

A list of medical colleges in India providing facilities for admission to the M.B.B.S. course is given below. The duration of the course is $5\frac{1}{2}$ years, followed by compulsory housemanship (rotating) of 1 year, in the case of students who are admitted to the pre-medical course; and 4½ years, followed by compulsory housemanship (rotating) of 1 year, in the case of students who are admitted to the first year of M.B.B.S. This is in accordance with the revised curriculum of the Medical Council of India, which has been recommended for adoption from 1963-64.

In the medical colleges in Mysore, Andhra Pradesh, Madras, Pondicherry and Kerala, admissions are made to the pre-medical course, as the course has not been integrated. In Assam and West Bengal, admissions are made both to pre-medical and the first year of M.B.B.S.

The minimum age for admission to the pre-medical course is 16 years and to M.B.B.S. 17 years, on a date which varies from university to university.

Name of College	Courses and Number of Seats Available					Postgraduate Diploma	Name of Dean/Principal
	M.B.B.S.	M.D.	M.S.	M. Sc.			
ANDHRA PRADESH							
1. Andhra Medical College, Vishakhapatnam	125	28 Gm, Pt, Bc, Ob, Ph	24 Gs, Op, EN, Or	4 At, Py	42	Dr. P. Narasimharau	
2. Guntur Medical College, Guntur	150	41 Gm, Pt, Bc, Ph, Mw	32 Gs, Op, EN, Or	12 At, Py, Bi	21	Dr. I. Chalapathy Naidu	
3. Kurnool Medical College, Kurnool	100	6 Gm	6 Gs	1 At	11	Dr. S. Venkateswarulu	
4. Osmania Medical College, Hyderabad	125	31 Gm, Pt, Ob, Ph, Pa	16	6	82	Dr. M.Y. Ansari	
5. Gandhi Medical College, Hyderabad	100	—	—	—	—	Dr. B.S. Surthi	
6. Rangaraya Medical College, Kakinada	110	—	—	—	—	Dr. V. Ramachandira Rao	
7. Kakatiya Medical College, Warangal	100	—	—	—	—	Dr. T. Lakshminarayana	
8. Sri Venkateswara Medical College, Tirupati, Dist. Chittoor	50	—	—	—	—	Dr. C. Venkataratnam	
ASSAM							
9. Assam Medical College, Dibrugarh	110	N.A.	N.A.	N.A.	N.A.	Dr. M.N. Bhattacharyya	
10. Gauhati Medical College, Gauhati	100	—	—	—	—	Dr. S.N. Sarma	
11. Medical College, Silchar	N.A.	—	—	—	—	—	
BIHAR							
12. *Prince of Wales Medical College, Patna	150	79 Gm, Pt, Ph, Pa, Pa, Fm, Py, Prev. Med, Dt	118 Gs, Op, EN, Or, At, Og, An	12 Ms	70	Dr. V.N. Singh	

Abbreviations :

N.A. = Not available.
An = Anaesthesiology
At = Anatomy
Bc = Bacteriology
Bi = Bio-Chemistry
Dt = Dermatology
EN = E.N.T.
Fm = Forensic Medicine
Gm = General Medicine

Gs = General Surgery
Med = Medicine
Ms = Medical Science
Mw = Mid-wifery
My = Mycology
Ne = Neuro-Surgery
Og = Obstetrics & Gynaecology
Op = Ophthalmology
Or = Orthopaedics

Pa = Paediatrics
Ph = Pharmacology
Prev. Med. = Preventive Medicine
Pa = Psycho-Medicine
Pt = Pathology
Py = Physiology
TB = Tuberculosis
Th = Thoracic Surgery

* Ph. D. course also available

Medical Colleges in India—Contd.

13. Daubhanga Medical College, Lakeriasarai	150	50 Gm, Pt, Ph, Pa, Py, Prev. Med, Bi	51 Gs, Op, EN, Or, At, Og, An	—	—	Dr. T.B. Gupta
14. Medical College, Ranchi	148	—	—	—	—	Dr. N.L. Mitra
15. Medical College, Damodar Road, Sakchi, Jamshedpur	48	—	—	—	—	Dr. G.B. Sahay
GUJARAT						
16. B.J. Medical College, Ahmedabad	130	40 Gm, Pt, Bc, Ph, Mw, Pa, TB	20 Gs, Op, EN, Or	16 Pt, Ph, At, Py	31	Dr. E.M. Best
17. *Medical College, Baroda	80	25 Gm, Pt, Og, Ph, Py	20 Gs, EN, Or, At	25 Pt, Ph, At, Bc, Py	45	Dr. J.D. Pathak
18. M.P. Shah Medical College, Jamnagar	120	16 Pt, Ph	8 Gs	32 Pt, Ph, At, Py	—	Dr. A.D. Joseph
JAMMU & KASHMIR						
19. Medical College, Srinagar	229	—	—	—	—	Dr. M.L. Gujral
KERALA						
20. Medical College, Trivandrum	150	18 Gm, Pt, Bc, Mw	8 Gs	6 At, Py, Bi	11	Dr. M. Thangavelu
21. Medical College, Calicut	150	—	—	—	—	Dr. R. Ananthanarayanan
22. Medical College, Kottayam	50	—	—	—	—	Dr. C.M. Francis
23. Medical College, Alleppey	N.A.	N.A.	N.A.	N.A.	N.A.	Dr. N.G. Pandalai
MADHYA PRADESH						
24. Medical College, Jabalpur	110	9 Gm, Pt, Ph, Py, Prev. Med.	10 Gs, At, Og	—	—	Dr. J.C. Saehdev
25. M.G.M Medical College, Indore	139	22 Gm	21 Gs	—	7	Dr. B.C. Bose
26. G.R. Medical College, Gwalior	140	16 Gm, Pt, Ph, Py	17 Gs, Op, At, Og	—	9	Dr. B.N. Balkrishna Rao
27. Gandhi Medical College, Bhopal	110	—	—	—	—	Dr. R.P. Singh
MADRAS						
28. Madras Medical College, Madras	150	25 Gm, Pt, Bc, Mw, Pa	21 Gs, Op, EN, Or, Og, Th, Ne	—	91	Dr. K.G. Krishnaswami
29. Stanley Medical College, Madras	125	12 Om	12 Gs	—	12	Dr. A.N.K. Menon
30. Kilpauk Medical College, Kilpauk, Madras-10	75	—	—	—	—	Dr. K.P. Sarathy
31. Christian Medical College, Vellore	50	6 Gm, Pt	7 Gs, Th, Ne	—	34	Dr. Jacob Chandy
32. Madurai Medical College, Madurai	150	—	—	—	—	Dr. C.K.P. Menon
33. Thanjavur Medical College, Thanjavur	100	—	—	—	—	Dr. H.D. Singh

*Ph. D. course also available.

Medical Colleges in India—Contd.

MAHARASHTRA

34. *Grant Medical College, Bombay	160	120 Gm, Pt, Og, Ph, Mw, Pa, TB	75 Gs, Op, EN, Or	45 Bi, Med, My, Ap B	N.A.	Dr. D.V. Vitkar
35. Seth G.S. Medical College, Parel, Bombay	85	N.A.	N.A.	N.A.	N.A.	Dr. S.V. Joglekar
36. Topiwala National Medical College, Bombay	65	N.A.	N.A.	N.A.	N.A.	Dr. T.H. Rindam
37. B.J. Medical College, Poona	150	54 Gm, Pt, Og, Ph,	30 Gs.	8 At, Py	30	Dr. F.J. Mendonca
38. Medical College, Nagpur	150	N.A.	N.A.	N.A.	N.A.	Dr. P.L. Powar
39. Govt. Medical College, Aurangabad	70	—	—	—	—	Dr. Gopal K. Karandikar
40. Armed Forces Medical College, Poona	—	10 Gm.	10 Gs	—	20	Major General P.N. Barilhan
41. Medical College, Miraj	N.A.	N.A.	N.A.	N.A.	N.A.	Dr. B.B. Sethna

MYSORE

42. Kasturba Medical College, Manipal	180	—	—	4 At	—	Dr. R.P. Koppikar
43. Medical College, Mysore	152	—	—	4 Ph, At	6	Dr. J.J. Dharmaraj
44. Bangalore Medical College, Bangalore	150	12 Gm.	12 Gs	—	8	Dr. T. Manickam
45. Karnatak Medical College, Hubli	75	—	—	—	—	Dr. B.N. Lingaraju
46. Medical College, Bellary	75	—	—	—	—	Dr. H.A. Nagaraja Rao
47. St. John's Medical College & Hospital, St. Mary's Town, Bangalore	N.A.	N.A.	N.A.	N.A.	N.A.	Dr. L. Monteiro

ORISSA

48. S.C.B. Medical College, Cuttack	200	8 Gm	15 Gs, Op, EN	6 Ph, At, Py	21	Dr. Raghunath Sahu
49. Medical College, Burla (Sambalpur)	100	—	—	—	—	Prof. R.N. Misra
50. Medical College, Berhampur (Cuttack)	40	—	—	—	—	Dr. S.N. Pattnaik

PUNJAB

51. Medical College, Amritsar	93	20 Gm	20 Gs	—	30	Dr. Y. Sachdeva
52. Christian Medical College, Ludhiana	50	—	—	—	—	Dr. G.N. Constable
53. Govt. Medical College, Patiala	100	N.A.	—	—	—	Dr. Amarjit Singh
54. Medical College, Rohtak (Students at present admitted at Medical College, Patiala)	50	—	—	—	—	Dr. Inderjit Dewan

* Ph. D. course also available

Medical Colleges in India—Contd.

RAJASTHAN

55. *S.M.S. Medical College, Jaipur	120	N.A.	N.A.	N.A.	—	Dr. R.M. Kasiwal
56. *Bikaner Medical College, Bikaner	100	—	N.A.	N.A.	—	Dr. S.P. Wanchoo
57. Medical College, Udaipur	40	—	—	—	—	Dr. B.N. Sharma

UTTAR PRADESH

58. K.G. Medical College, Lucknow	150	N.A.	N.A.	—	66	Prof. R.V. Singh
59. *Medical College, Agra	100	N.A.	N.A.	—	30	Dr. P.N. Wahi
60. G.S.V.M. Medical College, Kanpur	150	N.A.	N.A.	—	46	Dr. S.P. Srivastava
61. College of Medical Sciences, Banaras Hindu University, Varanasi	40	—	—	—	—	Dr. K.N. Udupa
62. Moti Lal Nehru Medical College, Allahabad	50	—	—	—	—	Dr. Pritam Das
63. Medical College, Muslim University, Aligarh	N.A.	N.A.	N.A.	N.A.	N.A.	—

WEST BENGAL

64. Medical College, Calcutta	100	—	—	—	42	Dr. K.C. Sarbadhikari
65. R. G. Kar Medical College, Belgachia Road, Calcutta-4.	112	—	—	—	32	Dr. H.K. Indra
66. Nitraton Sircar Medical College, Calcutta	100	—	—	—	—	Dr. R.N. Guha Majumdar
67. Calcutta National Medical Institute, 32, Gorachand Road, Calcutta.	125	—	—	—	—	Dr. K.N. Bagchi
68. Bankura Sammilani Medical College, Bankura	50	—	—	—	—	Dr. D.N. Mukherjee

DELHI

69. Lady Hardinge Medical College, (For Women), New Delhi	90	N.A.	N.A.	N.A.	8	Dr. (Miss) M. Chaudhuri
70. *All India Institute of Medical Sciences, Safdar-jang, New Delhi	50	N.A.	—	—	—	Dr. K.L. Wig
71. Maulana Azad Medical College, New Delhi	100	30 Gm, Pt, Og	12 Gs	20 Ph, At, Bc, Py, Bi	12	Maj.-Gen. B.N. Bhandari

PONDICHERRY

72. Medical College, Pondicherry	50	—	—	—	—	Dr. S.G. Vengsarkar
----------------------------------	----	---	---	---	---	---------------------

*Ph. D. course also available.

Education Abroad

Robbins Committee Report

The British Government is reported to have expressed its willingness to act on the broad lines of the Robbins Committee report published recently.

In order to accommodate students rising in number from 2,16,000 in 1962-63 to 5,60,000 by 1980-81, the committee advocates marked increase in the size of existing universities, the creation of six additional universities, and establishment of more than 20 new institutions of higher education of other types. This would bring the number of autonomous institutions of higher education in Britain from 32 to 60.

New Approach

In projecting student numbers, the traditional procedure had been to estimate the requirements of the economy and translate these into terms of student places. The new approach (which has long been taken in the U.S.A. and Canada) yields estimates based on the numbers of young people likely to have the capacity for higher education and the desire to go on beyond secondary school.

It is proposed that colleges of advanced technology should become technical universities, that teacher training colleges should become colleges of education, and that these as well as regional and area technical colleges should grant degrees.

Also recommended is the development of five institutions for scientific and technological education and research at an advanced level.

New University in U.K.

Five halls of residence, each housing more than 1,000 students will be a main feature of the new University of Warwick, to be built near Coventry. It will be one of the most modern universities built in the age of technology, and its student population will be one of the largest in Britain. Later, another five, and possibly 10, halls of residence are proposed to be added.

Problem of Numbers in Canada

In a paper on "The Problem of Numbers in University Enrolment", Dr. R. W. B. Jackson, Director of Educational Research, Ontario College of Education, has documented the fact that future enrolments in Canadian universities would be, by current standards, virtually astronomical.

He urges each province to make careful plans immediately for the coming expansion in higher education, and advises the universities to reverse the trend toward more restrictive admission and to recognise more concretely their role in helping to meet the needs of society. If they do not, he warns, government control of their affairs is inevitable.

421 Doctorates Awarded by Canadian Universities

Canadian Universities granted 421 Ph.D. and equivalent doctorates in 1962-63 as against 321 in 1961-62. In the same year, Masters' degrees and licences numbered 3,211 by comparison with 2,851 in 1961-62.

By field, the number of Ph.D.s awarded in 1962-63 were: Biological Sciences-124; Physical Sciences-163; Engineering and Applied Sciences-26; Social Sciences-48; and Humanities-60.

Diploma in Economic Planning

A new one-year diploma course in Economic Planning, with particular reference to developing countries, is to be introduced by Oxford University in October 1965. It is intended to meet the needs of civil servants and technical specialists from the developing countries who wish to acquire a deeper understanding of the theory and techniques of economic planning.

Free Berlin University

The Free University of Berlin recently marked the 15th year since its founding. Its present enrolment totals some 15,000 students, including many from abroad. Its constitution emphasises participation by students in decisions relating to the affairs of the university.

New Way of Aiding Educational Department

According to the Ultimate Heir Act passed in 1931 by the Alberta Legislature, properties of persons dying intestate in that province are turned over to the University of Alberta. Recent reports show that the fund resulting from this Act has accumulated over a million dollars.

The Act empowers the university to use the revenues from the fund to provide scholarships and assistance in the field of research. Currently the fund yields about \$ 30,000 a year for student aid and research. Total income from this source since 1931 has been approximately \$ 4,50,000.

\$ 1.2 Billion for Higher Education

The Higher Education Facilities Act, 1963 passed by the U.S. Congress, authorizes the expenditure of \$ 1.2 billion over the first three years of a five-year programme of grants and loans to public and non-profit private institutions of higher education.

Universities Commission for Nigeria

A National Universities Commission has been established in Nigeria. It will advise the Federal Government on the financial needs of university education and will assist in planning the balanced and co-ordinated development of universities. It will receive annually a block grant from the Federal Government and allocate it to the universities.

600-Year-Old Polish University

Cracow University, the oldest in Poland, is celebrating its 600th anniversary this year. It was founded in 1364 by Polish King Casimir the Great. The university has five faculties and 85 chairs. It employs 164 professors, 344 lecturers and assistant lecturers, and 142 teachers and other research staff. They take care of more than 5,000 students in regular courses and 1,500 others in extramural studies.

Unesco Handbook on Study Abroad

The 15th edition of *Study Abroad*, published by the United Nations Educational, Scientific and Cultural Organization (Unesco), lists 130,000 fellowships, scholarships and educational exchange awards for international study and travel during 1964 by 1651 donor agencies and international organisations in 116 States. A similar number will be available in 1965.

The awards are available in about 100 different fields of study and can be used in almost all parts of the world. The length of study offered varies from a few weeks to several years.

The 648-page book, containing texts in English, French and Spanish, provides a comprehensive work of reference for all persons interested in developing international relations and exchanges in the fields of education, science, culture and mass communications. It also serves as a guide to international fellowships and scholarships.

Low-priced British Books

Since the commencement of the British low-priced books project three years ago, a total of over 22.50 lakh copies of books have been issued under the imprint of the English Language Book Society, and of these more than 75 per cent have been distributed in India.

Dr. Trevor Williams, a member of the British advisory committee which selects the books in consultation with the Government of India, recently visited India to assess the progress made under this scheme and to obtain new ideas on bringing more standard works into the fold of the scheme.

One of the latest books to be issued under the scheme, at a price of 7s. (Rs. 6), is an edition of the complete works of Shakespeare, published to coincide with the 400th anniversary of the playwright's birth. The best-selling titles are in the "Aids to English" series. Between them, the 12 titles in the series have already sold 5 lakh copies.

University Libraries

The October 1963 issue of *Library Herald*, the quarterly journal of the Delhi Library Association, is a special "university library number". Within the compass of over a dozen articles, contributed by eminent librarians, academicians and other experts, the journal covers various aspects of the development and problems of university libraries in India. Among the subjects discussed in the special issue are: The Role of University Libraries in India (A.P. Srivastava); University Library Then and Now (S.R. Ranganathan); University Library Resources (A. Nilameghan); and Photo-duplication Services for Indian University Libraries (N. Datta). There is also an article on University Libraries in Japan.

Richest Collection of Manuscripts

Varanaseya Sanskrit Vishwavidyalaya is planning to purchase 20,000 manuscripts shortly for its Saraswati Bhawan Library, which has already the biggest collection of ancient manuscripts in the world. Last year about 35,000 rare manuscripts were added to the library.

Hindi Translations of Standard Books

During 1963, Jabalpur University undertook the translation of 13 standard books of university level into Hindi under the scheme of the Central Ministry of Education. The project which covers books on Economics, History, Political Science, Chemistry, Physics, Education and Agriculture, is expected to be completed by the end 1964.

Indian Books in Russian

A Soviet books exhibition of about 1,000 volumes, arranged by the U.S.S.R. Trade Representation in India, was held at the Osmania University Library from March 4 to 6. The exhibition consisted of Russian translations of books in Indian languages. The Russian edition of the Mahabharata was the highlight of the exhibition.

Book Bank Project

Shri Jawaharlal Nehru Book Bank, originally organised by the Student Aid Society, Bangalore, was inaugurated as a separate unit on January 15. The Student Aid Society was set up in 1959 jointly by the Rotary Club of Bangalore and the Ramnarayan Chellaram Trust. So far it has received over 20,000 books and 4,000 journals valued at about Rs. 3.5 lakhs from foreign countries as gifts and distributed them among about 80 institutions in the Mysore State.

Journal of Social Research

The April 1964 issue of the *Indian Journal of Social Research* carries several interesting articles on Indian and international sociological problems. The article on "Applied Sociology and the Refugee Problem" written by Juris Veide-manis, Asstt. Professor of Sociology at Wisconsin University, may be of special interest to many Indian readers, as it deals with the recent influx of refugees from East Pakistan into India.

Shri G.C. Hallen, in his editorial, highlights the role of Indian universities in enriching and developing sociology both as a social discipline and as an applied social science.

Engineering Terms in Hindi

A cell for the translation of engineering terminology into Hindi has started functioning at Roorkee University. When approved and standardised, the works would be incorporated in Hindi translations of engineering treatises.

Tamil Books for London University

The Bureau of Tamil Publications, a department of the Madras Government engaged in translating into Tamil standard textbooks from all over the world, has presented 83 Tamil books to the School of Oriental and African Studies, University of London. The presentation was made on April 13 by Shri M. Bhaktavatsalam, Chief Minister of Madras to Mr. M. W. J. M. Paterson, British Deputy High Commissioner in Madras.

LANGUAGE POLICY IN EDUCATION

By G. S. MAHAJANI

Vice-Chancellor, Udaipur University

In England, a few years ago, the B.B.C. invited Michael Oakeshott, Lord Lindsay of Birker, Roy Pascal, C.R. Morris, P.M.S. Blackett and Sir Walter Moberly to give six talks on "The Idea of a University". From all of them one conclusion emerged—that the university has to be a place of conversation. This raises two fundamental questions: First, what is to be the language of conversation? Secondly, how best to promote this conversation? In this article, I propose to deal with the first question.

There are three claimants in our country for being the language of conversation: the regional language, the federal language (Hindi), and English which is an international language. I start with the proposition that the claims of the regional languages have been recognised and that they have come to stay.

University Commission Report

As far back as in 1949, the University Commission, presided over by Dr. S. Radhakrishnan, observed: "Although we recognise that in the near future the regional languages will be the principal media of instruction at all stages in all provinces, we consider it desirable that the universities should have the option to use the federal language as the medium of instruction either for some subjects or for all subjects."

Since the publication of the report of the University Commission, three developments have taken place—

(1) In 1950 (January 26), we adopted a democratic constitution based on adult franchise. The result was that the common man came into his own, and it became inevitable that the language of administration would eventually be the same as that of the common man.

(2) In 1956, we redrew the map of India and almost all the States became unilingual. The result was that in each State the regional language, being the language of the common man, claimed to be the language of administration.

(3) The attitude of some States in the South has hardened against Hindi. We need not go into the causes, but the result of this has been that the option to use the federal language, as suggested by the Commission, has disappeared from the plane of realism.

All these factors have strengthened the claim of the regional language to be the language of conversation in the university. And today many universities have adopted regional languages for education over a part of the field, the whole of which had hitherto been occupied by English.

However, the adoption of the regional languages as media of education poses certain problems. It restricts academic mobility of both students and teachers. Recruitment of teachers from outside the State and appointment of external examiners becomes difficult. The process of national integration also gets slowed down with the restriction of academic mobility. From the point of view of public administration, the proposal to hold the examinations of the Union Public Service Commission (which are at present conducted in English) in all the 14 regional languages is manifestly impracticable,

unless you adopt a quota system for recruitment from various language regions. It is against this background that we have to evolve a policy reconciling the claims of the regional language, the federal language and English.

School Curriculum

As regards English, the University Commission says: "Our students who are undergoing training at schools which will admit them to a university or to a vocation must acquire sufficient mastery of English to give them access to the treasures of knowledge, and in the universities no student should be allowed to take a degree who does not acquire ability to read with facility and understanding works of English authors."

What does the Commission imply by prescribing *sufficient mastery of English* as an objective of school curriculum? On page 127 of the report we find the following course of study recommended for students in the 9th and 10th grades in schools:

Mother Tongue; Federal Language; English (Comprehension and Simple Composition); Elementary Mathematics; General Science; and Social Studies.

Thus "sufficient mastery of English" means "comprehension and simple composition", which implies ability to read an English newspaper with the aid of a dictionary and ability to write letters in English. I would suggest that in the schools a parallel policy should be followed for Hindi, and the goal should be sufficient mastery of the language as in the case of English.

Expert Opinion

According to the world-famous brain surgeon, Dr. Wilder Penfield of Montreal, who visited this country in the early part of 1957, the time to begin what might be called a general schooling in secondary languages (Hindi and English) in accordance with the demands of brain physiology is between the ages of 4 and 10. The child sets off for school then and he can still learn new languages without interposing the speech units of his mother tongue.

Taking into consideration the views of the University Commission and those of Dr. Penfield, it appears to me that the correct language policy in the schools would be to introduce the child to speak English and Hindi before he is 10 years of age. This accords well with the decision of certain States to introduce English in the third grade. The mother's method—conversational, direct method—should be used in the initial months. Formal teaching should begin in the fourth grade with reading and writing. Subjects like Science and Mathematics should be taught in English, making free use of the regional language. This will afford the pupil ample opportunities of conversation in English and help him to attain the objective of "sufficient mastery". This policy will also reduce the disparity that now exists between the two types of secondary schools—public and Mission schools on the one hand and the vast majority of the rest on the other. (Contd. overleaf)

At University Stage

In approaching the problem of the medium of instruction at the university stage one might preferably follow Newman by distinguishing science from literature. He says: "Science has to do with things, literature with thought; science is universal, literature personal; science uses words merely as symbols, literature uses language in its full compass as including phraseology, idiom, style, composition, rhythm, eloquence and whatever other properties are included in it."

As regards science, Newman further remarks: "It is true that all languages are pretty much alike for the purpose of science, but even in this respect some are more suitable than others which have to coin words or borrow them in order to express scientific ideas."

Hence I suggest that—

(a) for science and professional subjects, the language to be used should be one of the international languages, say English;

(b) for humanities the language should be the regional language;

(c) English and Hindi should both serve as link languages.

It may be mentioned that the policy outlined above is stated only in broad terms. Actually, however, the arrangement will not be as water-tight as it seems to be. In the first place, those students who have taken up arts or humanities will have some courses in science under the General Education pattern, so that they, too, will have to traverse the sector of English. Secondly, although social sciences are nearer arts subjects and humanities, there are certain areas which require the treatment of exact sciences. Here both English and regional languages will have to be used with judgement. Lastly, since one of the functions of the university is to be of service to the common man, it will be the duty of faculty members to produce popular science literature in regional languages and Hindi and to make available important researches in humanities in English and Hindi for people outside the region.

I would further suggest that to help migration of students every university should institute a four-to-six-month course to learn its regional language for the

benefit of students who come from other areas. This course could be conducted in English. After this course, the immigrants should not find much difficulty in following lectures given in the regional language of the university. This is more or less what is done in the universities of Germany for foreign students.

The solution suggested in this article aims at mitigating the difficulties in academic mobility and promoting national unity and integration. In the past we had a bilingual policy in the form of the use of the regional language in schools and of English in colleges. Here we suggest a bilingual policy in a different sense, that is the use of both languages in schools as also in colleges. The claims of the regional languages are respected by giving them full scope over the field of humanities. English will cover one common sector for all universities, that is science and technology. Nor is the arrangement water-tight, as each of the two fields will use the language of the other field for certain purposes. Both Hindi and English will be link languages.

Questions Answered

Lack of suitable text-books is often cited as a difficulty in the use of regional languages in the universities. Fortunately, this is now being gradually overcome. But we must not forget that standard books are almost always the result of class-room lectures. If college teachers initially take the trouble of preparing their lectures, have their synopses cyclostyled year after year, these accumulated notes will form the best basis for standard texts. We know so many instances in which standard books have simply grown out of lectures.

One last word before closing. The question is asked: If in Japan they do not necessarily advocate the use of English for science subjects, why should we do it in India? The answer is: Japan is unilingual and India has fourteen regional languages. With the adoption of the regional languages for education, we should maintain an area for all universities over which one common language would be used to prevent mutual isolation. Our solution suggests the retention of English, which is an international language and which will continue to serve as a link language along with Hindi.



Dr. A. C. Joshi, Vice-Chancellor, Panjab University, played the host at a dinner given to the university representatives who attended the 24th annual meeting of the Inter-University Sports Board at Chandigarh in the last week of April 1964.

Seen in the picture are (from l. to r.): Shri K.S. Narang, Registrar, Panjab University; Shri P.D. Gupta, Vice-Chancellor, Agre University; Dr. A.C. Joshi, President, IUSB; Shri B.F.H.E. Tyabji, Vice-Chancellor, Aligarh Muslim University; Shri P.N. Thepar, Vice-Chancellor, Panjab Agricultural University; Dr. B.D. Laroia, Secretary, IUSB; and Dr. S.M. Suman (Vikram University).

Four New Inter-University Tournaments Introduced

The Inter-University Sports Board of India, at its 24th annual meeting held at Chandigarh on April 24-25, decided to introduce rowing, squash racket, shooting and chess as additional items for inter-university tournaments this year. This raises the number of games covered by inter-university tournaments from 16 to 20.

The Board decided to introduce cycling next year.

The meeting was presided over by Dr. A.C. Joshi, Vice-Chancellor, Panjab University, and attended by representatives and delegates from 37 universities, including the Vice-Chancellors of Agra and Aligarh Universities and S.V. Vidyapeeth.

From next year, inter-university games will generally be played on a four-zone basis. It was also decided to have all-India combined university teams in certain games for participating in various national championships.



University delegates at the Sports Board meeting.

Five institutions were newly admitted as members of IUSB. They are: North Bengal University, Siliguri; Shivaji University, Kolhapur; Udaipur University; Varanaseva Sanskrit Vistawavidyalaya, Varansi;

and the Indian Institute of Technology, New Delhi.

The Board finalised the allocation chart for various inter-university tournaments to be held during the year 1964-65 (see below).

INTER-UNIVERSITY SPORTS BOARD OF INDIA

ALLOCATION CHART FOR 1964-65

Tournament	North Zone	South Zone	All-India Finals	Period of Tournament	
Athletics (Men & Women)	—	—	Rajasthan	Last week of December 1964	
Badminton (Men & Women)	Lucknow	Karnatak	Lucknow	First fortnight of October 1964	
Basketball (Men)	Banaras	Andhra	Andhra	Last week of November 1964	
Basketball (Women)	—	—	Gujarat	Last week of November 1964	
Boxing	—	—	Punjab	December 16 - 18, 1964	
Chess	—	—	Jammu & Kashmir	Firm Fortnight of October 1964	
Football	Altafabad	Utkal	Utkal	Last week of September and the first week of October 1964	
Gymnastics	—	—	Lucknow	Third week of December 1964	
Weight Lifting & Best Physique	—	—	Ceylon	Third week of December 1964	
Hockey (Men)	Agra	Osmania	Osmania	First fortnight of January 1965	
Hockey (Women)	—	—	Agra	First fortnight of January 1965	
Kabaddi	—	—	S.V. Vidyapeeth	Last week of November 1964	
Kho-Kho (Men & Women)	—	—	S.V. Vidyapeeth	Second week of January 1965	
Rowing	—	—	Calcutta	To be fixed	
Swimming (Men & Women)	—	—	Kerala	First week of October 1964	
Diving & Water Polo	—	—	—	—	
Squash Racket	—	—	Banaras	(Christmas Holiday)	
Shooting	—	—	Punjab	Second fortnight of October 1964	
Table-Tennis (Men)	U.P. Agri.	Nagpur	Nagpur	First fortnight of October 1964	
Table-Tennis (Women)	—	—	Sri Venkateswara	First fortnight of October 1964	
Tennis (Men)	Aligarh	Annamalai	Annamalai	January 5 - 15, 1965	
Tennis (Women)	—	—	Sri Venkateswara	January 5 - 15, 1965	
Volleyball (Men)	Patna	Poona	Patna	First fortnight of November 1964	
Volleyball (Women)	—	—	Jabalpur	First fortnight of November 1964	
Wrestling	—	—	Vikram	First fortnight of November 1964	
Cricket: From December 23, 1964 to January 15, 1965	North Zone Vikram	South Zone Andhra	East Zone Calcutta	West Zone Shivaji	Finals Baroda

PERSONAL

Dr. A. C. Joshi, President, IUB, Left New Delhi on May 16 for a week's visit to the U.S.S.R.

Shri D. P. Pandeya, Principal, Simadga College, Ranchi, has been appointed Registrar of K.S. Darbhanga Sanskrit University w.e.f. April 22, 1964.

Professor R.C. Mehrotra, Head of the Department of Chemistry, Rajasthan University, has been elected a Fellow of the National Institute of Sciences of India, and has also been appointed Chairman of the Advisory Committee for the Hindi Unit of CSIR.

Shri A.K. Mustafa, Secretary, CSIR, has been appointed *ex-officio* Joint Secretary to the Government of India in the Ministry of Education with effect from February 19, 1964.

Dr. F. Haydn Williams, Associate Dean of the College of Business Administration at the University of Washington, has been appointed President of the Asia Foundation effective January 2, 1964. Dr. Williams succeeds Mr. Russell G. Smith.

SHRI B. N. JHA

We record with deep regret the demise of Shri B. N. Jha, Vice-Chancellor, Jodhpur University, who died of heart failure on April 13. He was 67. For the last 44 years, Shri Jha had devotedly served the cause of education in India. Before taking up the Vice-Chancellorship of Jodhpur University, he acted as Adviser to the Government of India on Educational Affairs in Goa. Earlier, he had been Vice Chancellor of Allahabad and Gorakhpur Universities and Education Secretary to the Government of Uttar Pradesh.

UNIVERSITY NEWS is issued every alternate month. Price per copy : 30 np. plus postage. Annual subscription : Rs. 3/Sh. 6/8 1 (by surface mail); Rs. 6/Sh. 18/8 4 (air-mail). Remittance should be made by Money Order/Postal Order/Crossed Cheque (adding the bank commission if the cheque is realised out of Delhi) in the name of the Editor, UNIVERSITY NEWS c/o. the Inter-University Board of India, Rouse Avenue, New Delhi-1. Please note that we normally do not send the journal per VPP.

ADVERTISEMENT TARIFF

Space	Per Insertion	For 4 Insertions
Full Page (18x24 cm.)	Rs. 300	Rs. 1,000
Half Page	Rs. 175	Rs. 600
Quarter Page	Rs. 100	Rs. 350
5.5x5 cm. space (17 lines)	Rs. 40	Rs. 100

The ENGLISH LANGUAGE BOOK SOCIETY

&

Leading British Publishers

ANNOUNCE

Their **LOW-PRICED TEXTBOOK** Series in ►

Each title carries its distinctive coloured label

(Dark Red 21s./Rs. 16.80; Green 15s./Rs. 12;
Orange 12s./Rs. 9.60; and Blue 9s./Rs. 7.20)

AGRICULTURE
BUSINESS ADMINISTRATION
CHEMISTRY
ECONOMICS
ENGINEERING
MATHEMATICS
PHYSICS

The use of special measures has made the reduction possible, but in every case the original text and diagrams have been retained.

Please ask your bookseller to show you his stock of the series.

Watch also for announcements of other series which the Society is planning for the non-specialist.

THE

CONTEMPORARY ARTICLES OF OPINION



AMERICAN REVIEW

THOUGHT-PROVOKING. EDUCATIVE. QUARTERLY



THE AMERICAN REVIEW is a quarterly magazine published in English by the United States Information Service for circulation in India. Each issue consists of about 100 pages.

THE AMERICAN REVIEW is a thought-provoking magazine containing authoritative articles by eminent writers on all aspects of American life and civilization. These articles are representative examples of opinion and analysis current in the United States on many subjects of intellectual interest.

The subjects covered include art, literature and philosophy, economics, science, sociology, education, and law. The magazine has special appeal to students of American social history and culture.

THE AMERICAN REVIEW promotes understanding between the people of the United States and India by highlighting the democratic way of life and the interests and aspirations shared by the two countries.

Subscription Rates :

One Year (4 issues) Rs. 3/- Two Years (8 issues) Rs. 5.-

Subscribe only through your nearest Regional Distributor:

● DELHI : PATRIKA SYNDICATE Pvt. LTD., Gole Market, New Delhi-1. ● BOMBAY : LALVANI BROS., Taj Building, 210 Dr. D. N. Road, Bombay-1. ● CALCUTTA : PATRIKA SYNDICATE Pvt. Ltd., 12/1, Lindsay Street, Calcutta-16. ● MADRAS : THE SWADESAMITRAN LTD., Victory House, Mount Road, Madras-2.



Eastern Economy Editions

RESEARCH IN EDUCATION

JOHN W. BEST, BUTLER UNIVERSITY

Introduces the student to the fundamentals of research techniques. Basic Statistical concepts, simply presented, do not require mathematical sophistication to be understood. 320 pp.

3E list price Rs. 9.00

(Original U.S. list price \$ 6.75)

THE DEVELOPMENT OF MODERN EDUCATION, 2nd Ed.

FREDERICK EBY, UNIVERSITY OF TEXAS

Interprets the economic, political, religious, social, and industrial forces that have influenced the development of education in theory, organization, and practice. Treats elementary, secondary and higher education from the time of the North European Renaissance to the present day. 719 pp.

3E list price Rs. 12.60

(Original U.S. list price \$ 8.25)

STATISTICAL METHODS FOR SOCIAL SCIENTISTS

ILLIAN COHEN, VASSAR COLLEGE

Designed as an introduction to statistics for social scientists, this book deals with the collection, description, and analysis of data whose occurrences or measurements have been counted. It is simple enough to be understood by anyone who has taken an elementary algebra course. Problems are included in the exercises and examples are selected where statistical techniques are used in a theoretical framework. 192 pp.

3E list price Rs. 7.50

(Original U.S. list price \$ 5.95)

INTRODUCTION TO SOCIAL WELFARE, 2nd Ed.

WALTER A. FRIEDLANDER, UNIVERSITY OF CALIFORNIA, BERKELEY

The new edition provides an organic and comprehensive introduction to the philosophy, historic development, and present system of social welfare. Deals with the latest methods of social, group, and case work, community organization, social welfare administration and research. 589 pp.

3E list price Rs. 12.60

(Original U.S. list price \$ 7.95)

CONCEPTS & METHODS OF SOCIAL WORK

EDITED BY WALTER A. FRIEDLANDER, UNIVERSITY OF CALIFORNIA, BERKELEY

Analyzes social case work, social group work, and community welfare organization, showing their inter-relationships. The text includes problems, questions, and actual case studies. 308 pp.

3E list price Rs. 9.75

(Original U.S. list price \$ 6.75)

PRENTICE-HALL OF INDIA (PRIVATE) LTD.

M-97, AGGARWAL BUILDINGS, CONNAUGHT CIRCUS, NEW DELHI-1

Education Commission Appointed

The appointment and terms of reference of a 16-member Education Commission which would survey the entire field of educational development and make a comprehensive review of the country's educational system and advise the Government on the national pattern of education, were announced in New Delhi on July 14.

The Commission is headed by Dr. D.S. Kothari, Chairman of the University Grants Commission. Its other members include five eminent educationists from abroad. A few outstanding scientists and educationists from other countries are also being associated as consultants to the Commission.

The Commission will advise the Government on the general principles and policies for the development of education at all stages and in all its aspects. It need not, however, examine the problems of adult, medical or legal education, but such aspects of these problems as are necessary for its comprehensive inquiry may be looked into.

Government Resolution

The Government resolution announcing the appointment of the Commission said :

"In view of the important role of education in the economic and social development of the country, in the building of a truly democratic society, in the promotion of national integration and unity, and above all for the transformation of the individual in the endless pursuit of excellence and perfection, it is now considered imperative to survey and examine the entire field of education in order to realise, within the shortest possible period, a well-balanced, integrated and adequate system of national education capable of making a powerful contribution to all spheres of national life."

The Government realises that education, especially science and technology, is the most powerful instrument of social transformation



Dr. D.S. Kothari

and economic progress and that the attempt to create a new social order based on freedom, equality and justice can only succeed if the traditional educational system is revolutionised, both in content and extent.

"The Government of India is convinced that education is the key to national prosperity and welfare and that no investment is likely to yield greater returns than investment in human resources of which education is the most important component."

Comprehensive Review

The resolution said it was desirable to survey the entire field of educational development as

(Contd. on page 2, col. 1)

Members of the Commission

Dr. D. S. Kothari :

Chairman, University Grants Commission; Professor and Head of the Physics Department, Delhi University for many years; Honorary professor at the University and Scientific Adviser to the Minister of Defence from 1948 to 1961.

Shri A. R. Dawood :

General Secretary, Anjuman-i-Islam, Bombay; Served as Deputy Director of the Field Advisory Staff of the All-India Council of Secondary Education.

Mr. Herbert Lionel Elvin :

Director of the University of London Institute of Education; Fellow of Trinity Hall, Cambridge, 1930-44; Formerly member of the University Grants Committee (1936).

Shri R. A. Gopalwami, I.C.S., Retd. :

Director of the Applied Manpower Research Institute, New Delhi; Previously Chief Secretary to the Madras Government.

Dr. V. S. Jha :

Previously Director of Public Instruction and later Education Secretary in the Government of Madhya Pradesh; Vice-Chancellor, Banarus Hindu University (1950-60); First Director, Commonwealth Education Liaison Unit, London.

Shri P. N. Kirpal :

Secretary and Educational Adviser to the Government of India in the Ministry of Education; Director, National Council of Educational Research and Training; and Secretary-General, Indian National Commission for UNESCO.

Shri M. V. Mathur :

University Professor and Head of the Department of Economics and Public Administration, University of Rajasthan; Dean of the Faculty of Arts since 1962; Member of the Third Finance Commission; Director of Industrial Finance Corporation of India, New Delhi.

Dr. B. P. Pal :

Director, Indian Agricultural Research Institute, New Delhi; Has been a member of various Indian scientific delegations to foreign countries; Awarded Padma Shri in 1958; Recipient of Rabi Ahmed Kidwai Prize for Agricultural Botany in 1960 and Birbal Sahni Medal for Botany in 1962.

(Contd. on page 2, col. 2)

Education Commission

(Contd. from page 1, col. 2)

various parts of the educational system strongly interact and influence one another. It is not possible to have progressive and strong universities without efficient secondary schools and the quality of these schools is determined by the functioning of elementary schools. What is needed, therefore, is a synoptic survey and an imaginative look at education considered as a whole and not fragmented into parts and stages. In the past several commissions and committees have examined limited sectors and specific aspects of education. It is now proposed to have a comprehensive review of the entire educational system".

Foreign Collaboration

While the planning of education for India must necessarily emanate from Indian experience and conditions, the Government is of the opinion that it would be advantageous to draw on the experience and thinking of educationists and scientists from other parts of the world, in the common enterprise of seeking for the right type of education which is the quest of all mankind, especially at this time when the world is becoming closely knit together in so many ways.

It has, therefore, been decided to associate with the Commission, either as members or as consultants, some eminent scientists and educationists from other countries, including the U.K., U.S.A., U.S.S.R. and France. Unesco has agreed to provide three members. Negotiations are in progress for the inclusion of some more specialists from foreign countries. In addition, the Commission has been authorised to invite from time to time such other consultants in India in relation to any inquiry as it may consider necessary.

The Commission will submit its final report as early as possible, and not later than March 31, 1966. Where immediate implementation of certain programmes is necessary, the Commission may also submit, from time to time, interim reports dealing with limited sectors or problems of education.

French Education Expert on Indian Commission Likely

M.J. Capelle, Director-General of Pedagogy, School Instruction, Ministry of Education, France, recently concluded a four-day visit to New Delhi at the invitation of the Indian National Commission for Co-operation with Unesco. During his stay he held talks with the Indian Education Minister, Shri M. C. Chagla, and other senior officials of the Ministry of Education. He also exchanged views with prominent educationists, including Dr. and Mrs. C. D. Deshmukh, at a get-together arranged at the India International Centre.

M. Capelle is likely to be associated with the work of the National Education Commission set up by the Government of India recently.

Santanam Committee's Plea to Check Malpractices in 'Varsities

The Committee on Prevention of Corruption under the chairmanship of Shri K. Santanam, which recently submitted its report to the Government, has *inter alia* suggested that UGC and the Inter-University Board should take necessary steps to stop malpractices that may be prevailing in universities in matters of admission of students, recruitment of staff and management of funds.

The committee is of the view that universities being the main source of supply of officers for public services, especially at the higher level, should set standards of integrity which would become "an integral element of the intellectual and psychological outfit of every graduate".

Members of the Commission—Contd. from page 1

Kumari S. Panandikar :

Principal, College of Education and Head of the Post-graduate Department of Education at Karnatak University, Dharwar; Member, Central Advisory Board of Education; Previously Director of Education, Bonhay State; Director of Extension Programme for Secondary Education, Delhi (1959-60).

Dr. Roger Reville :

Director, Scripps Institution of Oceanography; Chairman of the committee appointed by the U. S. President to report on land and water development in the Indus Plain.

Shri K. G. Salyidain :

Visiting Professor of Education, Stanford University, 1964; Senior Scholar, East-West Centre, Hawaii (1963-64); Secretary and Educational Adviser to the Govt. of India, Ministry of Education; Educational Adviser to Rampur State; Chairman, Executive Board of the Indian National Commission for Cooperation with Unesco; Chairman, International Commission on Educational Reorganisation for Sudan.

Mr. Jean Thomas :

Inspector-General of Education, France; Assistant Director-General, Unesco.

Shri J. P. Naik :

From 1959-64, Adviser on Primary Education to the Ministry of Education, Government of India. Previously associated with the Bombay Education Department; Specialist on Primary Education.

Consultants

Sir Eric Ashby :

Master of Clare College, Cambridge, since July 1959; Fellow, Royal Institute of Chemistry; Professor of Botany, University of Manchester (1946-50); Vice-Chancellor, Queen's University, Belfast (1950-59); Member, University Grants Committee; President of the Association for Advancement of Science (1963).

Prof. P. M. S. Blackett :

Professor of Physics, Imperial College of Science and Technology since 1953; Pre-Rector since 1961; Fellow of several distinguished societies; Member, Scientific Policy Committee of European Organisation for Nuclear Research (1954-58); President, British Association for the Advancement of Science (1957-58).

Sir Willis Jackson :

Professor of Electrical Engineering, Imperial College of Science and Technology (1946-53 and 1961); Member, Central Advisory Council for England, Ministry of Education (1945-48); Member, Scientific Advisory Council, Ministry of Supply (1947-54); Member, University Grants Committee; President, Association of Supervising Electrical Engineers (1961-63).

Dr. Frederick Seitz :

Professor of Physics, University of Illinois; Chairman, Naval Research Advisory Council; Chairman, Governing Board, American Institute of Physics (1954-59).

Commonwealth Education Conference

A wide range of subjects—from illiteracy to scholarships—will come up for discussion at the third Commonwealth Education Conference to be held in Ottawa, Canada, from August 21 to September 4.

Shri M. C. Chagla, Union Minister of Education, will lead the Indian delegation to the conference. The other members of the delegation are: Dr. D.S. Reddi, Vice-Chancellor, Osmania University; Shri A. K. Ghosh, Secretary, Ministry of Education; Shri G. K. Chandiramani, Joint Educational Adviser; Dr. P.D. Shukla, Deputy Educational Adviser; Shri B. N. Malhan, Secretary to the Education Minister; Shri A.J. Kidwai, Education and Scientific Adviser to the Indian High Commission in London; and the Indian High Commissioner in Canada.

The conference will review the working of the Commonwealth Scholarship and Fellowship Plan and schemes relating to technical education and supply and training of teachers. These schemes were initiated at the first Commonwealth Education Conference held in Oxford in 1959, and finalised at the second conference in New Delhi in January 1962.

In addition, the forthcoming conference will receive reports on the equivalence of qualifications awarded in different parts of the Commonwealth, co-operation in social education and education in rural communities, and the work of the Commonwealth Education Liaison Committee and the Commonwealth Education Liaison Unit.

The conference will also examine further co-operative arrangements in curriculum development, the provision of text and other books, guidance and counselling.

New areas of co-operation to be explored are the reduction of adult illiteracy, the use of mass media in education and the provision of vocational training.

The Association of Commonwealth Universities has invited Prof. Samuel Mathai, Vice-Chancellor, Kerala University to be one of the two principal speakers at the conference. The subject of Prof. Samuel Mathai's address at the conference will be "The Commonwealth Scholarship and Fellowship Plan in

Relation to the Needs of Higher Education in Developing Countries". The other speaker, who will be from Britain, will speak on "Technical Education".

Dr. A. C. Joshi visits Paris, Oxford

Dr. A. C. Joshi, Vice-Chancellor, Panjab University, left for Paris on July 29 for attending the general assembly meeting of the Science Teaching Committee of the World Confederation of Organisations of the Teaching Profession from July 31 to August 6, 1964.

From Paris, Dr. Joshi proposes to go to Oxford to work out details of collaboration with the chairman of the Pergamon Press Ltd. for acquiring a printing press for Panjab University. He is likely to return to India by the middle of August.

Soviet Example in National Integration

Shri M.C. Chagla, Union Education Minister, who recently returned after a visit to the Soviet Union, pointed out in Bombay how the Soviet Union had succeeded in bringing about national integration in spite of multiplicity of languages.

He said: "The Soviet Union has 15 independent republics and 50 languages. Notwithstanding that, they have achieved complete national integration. They have done this not by suppressing any language but by encouraging all the languages equally, while every-

body learns the national language—Russian.

"Our position in India, with 16 linguistic States, is similar. If the Soviet Union can achieve national integration, I do not see why we cannot succeed," he said. "The moral is clear. We must encourage all our languages but we must have an overall national language."

Dr. Kothari Likely to Visit Russia

Dr. D. S. Kothari, Chairman, UGC, is likely to visit the Soviet Union shortly to discuss details of further Soviet assistance to strengthen centres of advanced studies, a report says. He will also discuss the possibility of Soviet assistance in setting up an Institute of Low Temperature Physics.

Preliminary discussions on these matters were held with the Soviet authorities by Shri M. C. Chagla during his recent visit to that country.

Another project in which Russia is reported to have shown keen interest is the establishment of 15 regional colleges of Engineering in India, eight of them under the U. N. Technical Assistance Programme.

Dr Joshi and Shri Pavate to Attend A.C.U. Meeting

Dr. A. C. Joshi, Vice-Chancellor, Panjab University, and Shri D. C. Pavate, Vice-Chancellor, Karnatak University, will represent the Inter-University Board of India at the Executive Council meeting of the Association of Commonwealth Universities to be held in London, Ontario (Canada) from September 11 to 15. They are also likely to visit some Canadian universities after the meeting.

The rod of justice thou hast given to every man on this earth and thy command is to strike where it is due. Let me take up that harsh office from thy hand with bent head and meek heart. Where forgiveness is sickly and self-indulgent, give me the strength to be cruel. Let truth flash out from my tongue like a keen sword at thy signal and let me pay my best homage to thee by righting wrong with all my power. Let thy wrath burn him into ashes who does what is unjust or suffers injustice to be done.

RABINDRANATH TAGORE

Indo-Afghan Cultural Pact Ratified

The Afghan National Assembly has unanimously approved the cultural agreement between Afghanistan and India, which was signed on October 4, 1963 by the Education Ministers of India and Afghanistan at Kabul.

The five-year agreement envisages further strengthening of cultural ties by exchanging cultural delegations, scientists, teachers, fellowships and scholarships. It also aims at promoting cultural and intellectual exchange by arranging concerts and exhibitions and holding sports competitions.

Asian and African Students in India

The Education Minister, Shri M.C. Chagla, said in the Rajya Sabha on June 4 that 3,726 foreign students from Africa and other countries of Asia were studying in various colleges and universities in India. During last year, 159 scholarships with a total value of Rs. 20,79,000 were sanctioned for the benefit of these students.

Foreigners Learning Indian Languages

Five hundred foreign students are reported to be learning modern and classical Indian languages in India.

These students, who come from Japan, Egypt and other Arabian countries, Russia, Britain and America, are learning Hindi, Urdu and Sanskrit. Most of them are studying in Delhi, Bombay and Calcutta.

Indian Team to Study Soviet Methods of Mass Education

Indian experts may be sent to the U.S.S.R. next autumn to study Soviet methods of running evening classes and correspondence courses.

Shri M.C. Chagla, who recently concluded his official visit to the Soviet Union, has found that the evening classes and correspondence courses in Russia are playing an effective part in the advancement of knowledge, and that India can adopt with profit these methods for the solution of its own problems in spreading education among the masses.

Hostel for Foreign Students

A 100-room hostel for foreign students, named the International Students' house, was recently inaugurated in Delhi by Shri M.C. Chagla, Union Education Minister.

Constructed by the Government-sponsored International Students' Housing Society at a cost of Rs. 9 lakhs and managed by the Indian Council of Cultural Affairs, the new hostel has a swimming pool, a play ground, a tennis court, a library, a lounge and a radio room. Boarding and lodging facilities are provided at a moderate cost of Rs. 50 per month.

Speaking on the occasion, Shri Chagla said that the hostel was an experiment in international living. Students of different countries representing diverse races, cultures and religions would share the experience of common living and develop understanding and mutual respect for each other's cultures.

The new hostel, which has accommodation for 90 students and four tutors, is only the first phase of an ambitious programme to provide cheap accommodation for foreign students. In a year or two ICCA intends constructing another hostel where women students will also be accommodated.

British Institute Renamed

The British Institute of Radio Engineers, London, has been renamed as "The Institution of Electronics and Radio Engineers" w.e.f. February 27, 1964.

The recognition accorded by the Indian Ministry of Education to the

graduate membership examination held by the institute will hold good for the same examination that may now be held by the institute under its new name.

Institute of Russian Studies

During his recent visit to the Soviet Union, Shri M.C. Chagla is understood to have paved the way for the setting up of an Institute of Russian Studies in New Delhi.

The institute, which is likely to be set up by July next year, will provide facilities for the study of Russian language and literature. The Soviet Union has undertaken to provide Russian professors and books.

It is stated the institute will provide a three-year degree course in Russian Studies and a short course in Russian Language for Indian students proceeding to the Soviet Union for advanced studies in Engineering and Technology and going to industrial establishments in the U.S.S.R.

Recognition of U.S. Degrees

The Government of India has decided to recognise the Master's degree in Engineering and technical subjects awarded by American universities/institutions at par with corresponding degrees of Indian universities for purposes of recruitment to the Central Government Service, provided that the degrees are obtained from those universities/institutions whose undergraduate curricula/degrees are accredited by the appropriate American accrediting agencies and that the Master's degree is obtained after a first degree in the appropriate subject from a recognised institution.

PLEDGE TO FOLLOW NEHRU'S IDEALS

The new academic year at Indian Universities, colleges and other educational institutions began with students and teachers taking a solemn pledge to follow Nehru's ideals. They also observed two minutes' silence in memory of the departed leader.

The suggestion to this effect was made by Union Education Minister, Shri M.C. Chagla, in a letter to all State Education Ministers, Vice-Chancellors of universities, and heads of other educational institutions.

The pledge reads: "In memory of our departed revered leader, Jawaharlal Nehru, and as a memorial to his sacred memory, we the undersigned students of ...take this solemn pledge that we shall always follow his noble ideals, love our country with all our mind and heart, serve her to the best of our ability, work towards the amelioration of the conditions of life of our fellowmen without difference of caste or creed, promote peace, harmony and goodwill, truthfulness and honesty, in short do all that was nearest to the heart of our great leader."

Chagla Calls for a National Educational Policy

Speaking on an unofficial resolution in the Lok Sabha on June 5, Shri M.C. Chagla, Union Education Minister, stressed the need for a national educational policy.

"Education is important both for national integration and for investment in human beings. If we want to achieve our political, social and economic goals, we can only do so through education and, therefore, in order that education can help us to achieve these goals, it must be national in character."

Shri Chagla said the present constitutional provisions posed certain administrative difficulties in implementing a national and co-ordinated policy. It was "unfortunate" that education was not a concurrent subject. "I think it is tragic that when our Constitution-makers wrote our Constitution, they did not think of the importance of education for national integration," he remarked.

According to the present constitutional position, he said, each State could insist on having its own educational policy. He, however, expressed his satisfaction over the gesture shown by the State Education Ministers at their recent conference in agreeing to a co-ordinated policy, though without agreeing to a constitutional change.

Shri Chagla said he was not interested merely in the constitutional change but in "concurrency" and in all the States agreeing to the broad outlines of a national educational policy.

National Objective

By a national policy he did not mean a "uniform" policy. Uniformity, he conceded, was not possible. Each State had its own local and regional problems, its own financial problems. So a certain amount of flexibility must be permitted.

"But, then, there must be a clear conception of where we are going in education, what are we going to achieve, what are our objectives and what are our targets.

"I take it that the objective the target, we have is to have a unified, strong and powerful nation, a nation that believes in the secular ideal,

a nation which believes in equality, a nation which believes in fighting poverty and in transforming a poor society into a prosperous society. If we all agree on these objectives, then it is not difficult to have a national educational policy."

The Education Minister deplored the fact that education was not given top priority. Whenever there was to be a cut, the first victim was education.

"We do not realise that education means investment in human beings. It is no use having steel mills and hydro-electric schemes if we have not got the human beings to run them. Therefore, education to my mind is more important than any other investment.

Low Expenditure

"And yet how much do we spend on education? I am shocked to find that our expenditure on education... is one of the lowest as compared with any country. We are spending 2.6 per cent of the national income on education, as against the minimum of 4 per cent recommended for the developing countries. I must say to the credit of the States that they are spending 20, 25 and 30 per cent of their budget on education."

Shri Chagla then enumerated various problems of education. At the elementary stage, there was the problem of basic education and the difference of opinion on that, the controversial question whether there should be one shift or two shifts, and another whether elementary education should be undertaken by the local authority, the taluka or the municipality.

In the case of secondary education, a target of 12 years of school education followed by a three-year degree course had been laid down. It had, however, not been possible to bring about uniformity so far. There was also the problem of teacher training.

Discussing the question of quantity *versus* quality, he agreed that it was the duty of the State to give education to everyone in the country. No citizen should be denied education. But at the same time, to build up a great nation, it was necessary to have men of the highest stature. It was essential, therefore, that for the next few years appropriate importance should be attached to quality. The Education Ministry would have some centrally-sponsored schemes which would pick out certain institutions and give them full support so that they could go to the top. These institutions should give the finest education that could be imparted in any country.

Post-graduate Studies

Shri Chagla also emphasized the importance of post-graduate studies. He complained that enough post-graduate students were not being trained and, therefore, the supply of teachers at the degree level was not adequate.

Dealing with the question of teachers' pay-scales, he said: "One of the tragedies of education in this country is that we have ceased to attract good men to the educational career."

Another problem needing attention was the education of women. In his words, "no nation can be considered educated unless its women are educated".

Sapru Committee's Report

The eight-man committee of Members of Parliament headed by Shri P.N. Sapru, appointed some time ago by the Union Ministry of Education to examine the provisions of the Constitution regarding the responsibility of the Central Government in the field of higher education, is understood to have come to the conclusion that higher education should be made a concurrent subject, if the Centre is to bear a greater financial responsibility and ensure better standards.

One member of the committee is, however, reported to have dissented with the majority opinion and pointed out that instead of amending the Constitution, the powers under the UGC Act should be fully utilized for the purpose of making higher education more effective.

New Universities

As against the addition of only one university during 1963, six new universities have been established during the current year. This brings the total number of universities in India from 55 to 61. Proposals for half-a-dozen more universities are under consideration.

The new universities established in 1964 are: Andhra Pradesh Agricultural University, Hyderabad; Indore University; Jiwaji University, Gwalior; Ravi Shankar University, Raipur; the University of Agricultural Sciences, Bangalore and Agricultural University, Mysore.

In addition, the Central Government has recently recognised two institutions of higher education—the Birla Institute of Technology and Science, Pilani, and the Tata Institute of Social Sciences, Bombay—as “institutions deemed to be universities” for purposes of the University Grants Commission Act, 1956. The total number of institutions under this category now stands at nine.

F.R.I. May Become University

The Government of India has decided to move legislation for converting the Forest Research Institute, Dehra Dun, into a university, it is learnt. No Indian university at present has a faculty of Forestry or offers facilities for research in Forest Biology and allied fields.

At present, the Forest Research Institute offers a two-year diploma course and a two-year certificate course in Forestry for persons sponsored by Central and State Forest Departments. It also offers facilities for post-graduate studies and research in Silviculture, Forest Statistics, Botany, Mycology, Entomology, Wood Preservation, Timber Engineering, Timber Mechanics, and Paper. It has been recognised by many Indian universities as a centre for post-graduate research work, and by FAO and IUFRO as an international centre for forestry training.

With the enactment of the proposed legislation, the institute would be entitled to grant its own degree of Ph. D. and D.Sc. by research, and B. Sc. in Forestry in place of the present diploma.

'Jawaharlal Nehru University'

The Union Ministry of Home Affairs has approved the proposal that the second university to be set up in Delhi be named 'Jawaharlal Nehru University'.

Legislation for the establishment of this university will be introduced in the next session of Parliament.

The new university, which will be located in South Delhi on a 1000-acre site, will lay emphasis on science, technology, medicine and agriculture.

The total cost of the project is estimated at Rs. 10 crores, of which Rs. 3 crores will be the capital cost.

Meanwhile, it is proposed to develop the present Delhi University to the level of an international university, once the second university is set up in the Capital. The Ford Foundation is understood to have offered sizable financial assistance for the new project. A special planning unit to prepare development plans of the university is likely to be set up shortly.

Bangalore University Inaugurated

Shri M.C. Chagla, Union Education Minister, inaugurated Bangalore University on July 10.

The university, to be the first federal type of university in the South, will have 27 affiliated and constituent colleges which were previously attached to Mysore University. The century-old Central College, Bangalore will be its nucleus.

Speaking on the occasion, Shri Chagla pleaded that the new university should place special emphasis on science and technology, but without neglecting the humanities.

Jabalpur Agricultural University Soon

The Madhya Pradesh Agriculture Minister announced recently that the proposed agricultural university at Jabalpur would start functioning from October 2.

Dr. J.S. Patel, Agriculture Commissioner, Government of India, will be the first Vice-Chancellor of the proposed university, which is likely to be named after the late Shri Jawaharlal Nehru.

Steady Increase in Enrolment

According to a preliminary statistical report for 1963-64 prepared by UGC, enrolment at Indian universities, including Intermediate Boards, increased from 11,55,380 in 1961-62 and 12,72,666 in 1962-63 to 13,84,697 in 1963-64, showing an increase of approximately 20 per cent in two years.

The percentage of women students in the three successive academic years was 17.3, 18.5 and 19.5 respectively.

The staff-student ratio improved from 15.5 in 1961-62 to 16.3 in 1962-63 and 17.3 in 1963-64.

There were 55 universities and 2,111 colleges in 1963-64, as against 54 universities and 1,938 colleges in 1962-63 and 46 universities and 1,761 colleges in the year preceding.

There was a perceptible rise in the number of teaching departments at the universities. This rose from 904 in 1961-62 to 941 in 1962-63 and further to 1,102 in 1963-64.

Indian Academy of International Law and Diplomacy

An Indian Academy of International Law and Diplomacy is proposed to be established in Delhi.

The first of its kind in Asia, the academy will offer a three-month certificate course and a specialised diploma course in selected subjects, such as Law of International Rivers, Law of Air and Outer Space, International Court of Justice and Private International Law.

The only other institutions doing similar work are the School of International Law and Diplomacy attached to Harvard University, U.S.A., and the International School in Geneva.

Institute for Social Sciences, Humanities

The Government of India, it is said, has decided to establish an institute for higher studies in social sciences, humanities and comparative religions in Rashtrapati Niwas, Simla. The institute is likely to start functioning next year.

Scholarships & Awards

Inter-University Scholarships

The University Grants Commission, it is understood, has decided to institute a national scholarship scheme, under which outstanding graduates would be enabled to pursue their post-graduate studies leading to a Master's degree in humanities or science at places which offer the best available guidance and facilities in their respective fields of study.

The scheme, which is likely to be introduced this year, also aims at promoting national integration by bringing together students from different regions.

It is proposed to allocate 250 scholarships to various universities, which shall select their outstanding graduates for post-graduate studies at other universities.

The value of the scholarship, tenable for two years, is Rs. 120 per month. In addition, each student will get Rs. 100 initially to cover his incidental expenses, Rs. 200 per annum for the purchase of books, and actual second class railway fare from the centre of study to his home place once a year.

U. G. C. Fellowships

For 1964-65, UGC has awarded 41 senior and 136 junior research fellowships in science, humanities and social sciences. The senior fellowship is of the value of Rs. 500 per month and the junior fellowship of Rs. 300 per month.

UGC has also allocated 265 post-graduate research scholarships to 41 universities for the year 1964-65.

Travel Concessions for Teachers

It has been decided to extend travel concessions to teachers of the Central universities in conformity with the provision in this respect existing for the Central Government employees. Other universities may also be asked to follow suit.

'Jawaharlal Nehru Award'

In appreciation of the outstanding contribution to the promotion of international understanding and friendship between peoples of different countries by Shri Jawaharlal Nehru, the Indian Council for Cultural Relations has decided to institute immediately a "Jawaharlal Nehru Award".

The award is proposed to be given every year to a person of pre-eminence who has contributed most, particularly during the preceding year, to the ideal of world peace and the brotherhood of man by dedicated service in the field of international understanding and friendship between peoples of different countries. The amount of the award will be Rs. one lakh.

'Nehru Prize'

The Federal Republic of Germany has offered to institute a "Nehru Prize" at Delhi University, commemorating the late Prime Minister's interest in scholarship and historical research.

The prize, which will be of the value of DM 3,000 (Rs. 3,500), will be awarded every year (for a period of ten years) to a scholar who submits the best thesis on a theme relating to Indo-German relations in the cultural and historical fields.

Scholarships for Studies in Hindi

During 1964-65, the Government of India will award 1,000 scholarships for post-matriculation studies in Hindi to students of non-Hindi-speaking areas.

For application forms and other particulars, desiring candidates should contact the Director of Public Instruction, Director of Education of their States.

Fellowships for Agricultural Studies

The Board of Agricultural Education has recommended that 5 per cent of the students applying for post-graduate studies in agricultural colleges should be given fellowships of the value of Rs. 250 per month, and 5 per cent of the students joining approved agricultural veterinary and home science colleges for the degree course be awarded fellowships worth Rs. 200 per month.

U. S. Scholarship for Agricultural Studies

A scholarship fund has been established in the U. S. A. to enable students from farm families in India to attend U. P. Agricultural University in Pant Nagar.

The first scholarship, to be offered this year, is valued at Rs. 600 (\$126). By 1967, the number of scholarships will be increased to four.

The scholarship fund was initiated with a \$126 donation from Prof. R. I. Webb, until recently Adviser to the Director of Farms at U. P. Agricultural University.

German Fellowships

The Alexander Von Humboldt Foundation has announced the offer of fellowships for advanced research at universities and research institutes in the Federal Republic of Germany during the academic year 1965-66. The grantee will be paid a scholarship of DM 800 (approximately Rs. 940) per month for a period of ten months. Travel expenses will be borne by the Foundation where they are not met by the government or the organisation to which the grantee belongs.

(Contd. on page 15, col. 3)

ADVERTISEMENT RATES

Space	Per Insertion	For 4 Insertions
Full Page (16x24 cm.)	Rs. 300	Rs. 1,000
Half Page	Rs. 175	Rs. 600
Quarter Page	Rs. 100	Rs. 350
5.5x6 cm. space (17 lines)	Rs. 40	Rs. 140

Summer Institutes

Chemistry

Thirty-nine secondary school teachers, including six women teachers, from Rajasthan, Uttar Pradesh, Punjab and Delhi attended the summer institute in Chemistry organised by Rajasthan University from June 8 to July 15, 1964, under the directorship of Prof. R.C. Mehrotra, Head of the university Department of Chemistry.

The main objective of the institute, sponsored jointly by UGC, NCERT and USAID, was to introduce to the participants the newer approaches in the teaching of Chemistry. The materials prepared by the Chemistry Education Material (CHEM) Study Group in the U.S.A. formed the central theme of the programme.

The programme comprised group discussions, practicals, classroom demonstrations and film shows on the Chem Study Group material.

Dr. Hiebert and Mr. Merritt came as visiting teachers from the U.S.A. to share their experience of running summer institutes on the basis of the Chem Study Group material.

Among the other distinguished visitors who gave talks at the summer institute were: Dr. D.S. Kothari, Chairman, UGC; Dr. B.D. Laroia, Secretary, IUB; Prof. R.C. Kapoor, Jodhpur University; Prof. A.R. Kidwai, Aligarh Muslim University; Dr. R.N. Rai, NCERT; Dr. J. Paul Leonard; and Dr. T. Garai, Budapest University, Hungary.

Similar institutes for higher secondary school teachers in Chemistry were held on zonal basis at Osmania, Poona and Burdwan Universities.

The institute at Osmania University was attended by 44 teachers. Two American visiting professors—Dr. Milton Tamres of the University of Michigan; and Mr. Kenneth V. Fast, Board of Education, Missouri—served as scientist-counselants.



Prof. R.C. Mehrotra, Dr. J. Paul Leonard, Dr. Hiebert and Dr. D.S. Kothari (back to the camera) are seen engaged in a keen discussion at the summer institute in Chemistry held at Rajasthan University.

For College Teachers

Institutes in Chemistry for college teachers were held at S.V. Vidyapeeth and Jadavpur, Osmania and Panjab Universities.

The institute at Osmania University, held from June 9 to 11, was attended by 28 teachers from different colleges in the South. The visiting scientists included Prof. W.T. Lippincott, Ohio State University; Prof. T.R. Seshadri, Delhi University; and Dr. Jagdish Shanker, Atomic Energy Commission.

The institute at Sardar Vallabhbhai Vidyapeeth was attended by 42 colleges teachers from Rajasthan, Maharashtra, Madhya Pradesh and Gujarat. Prof. Tobias of Minnesota University (U.S.A.) was the visiting scientist-counselant.

Prof. R.C. Brastead of the University of Minnesota (U.S.A.) assisted as a visiting professor of the summer institute held at Jadavpur University.

Physics

Forty-five secondary school teachers from Punjab, Rajasthan, Uttar

Pradesh and Madhya Pradesh attended the summer institute in Physics held at Banaras Hindu University from June 8 to July 15. It was directed by Prof. A.R. Verma, Head of the university Physics Department. He was helped by Prof. K.C. Clark of the University of Washington and Prof. B.F. Swan of the University of Chicago.

A similar institute was organised at Karnatak University in which about 43 teachers from Andhra Pradesh, Madras, Kerala and Mysore participated.

Two other summer institutes for secondary school teachers in Physics were held at Gujarat and Gauhati Universities.

For college teachers in Physics, summer institutes were organised at Bombay, North Bengal, Saugar and Sri Venkateswara Universities.

Biology

The summer institute for college teachers in Biology held at Aligarh Muslim University from June 9 to July 8 was attended by 38 teachers

from various colleges of Punjab, Delhi, Kashmir and Uttar Pradesh.

Prof. A.K. Chowdhury and Prof. A. Basir Khan, Heads of the Departments of Botany and Zoology of the university, acted as its director and joint director respectively. Dr. John L. Crites, Associate Professor of Zoology, Ohio State University, was the foreign consultant.

Similar institutes for college teachers in Biology were organised at Banaras, Kerala and Annamalai Universities on zonal basis.

The institute at Banaras Hindu University was held under the direction of Prof. R. Mishra, Head of the university Department of Botany, and was attended by 45 teachers from Bihar, Bengal, Assam and Orissa. Dr. C.W. Ellett, an American expert was associated with the institute.

Annamalai University arranged the institute at the Marine Biological Station at Porto-Novo under the directorship of Prof. R.V. Seshaiya. Biology institutes for secondary school teachers were held at Bombay, Delhi, Madras and Utkal Universities.

Mathematics

The Mathematics Department of Kurukshetra University organized a summer institute for 50 secondary school teachers of Mathematics at Rashtapatti Niwas, Simla from June 8 to July 11. Prof. S. D. Chopra, Head of the Department, directed the institute.

Two U.S. consultants, Prof. M.F. Rosskopf of Teachers' College, Columbia University, and Mr. P.D.M. Pereira of New Trier Township High School, Winnetka, Illinois, assisted in the academic programme of the institute.

The participants were also addressed by Shri Suraj Bhan, Vice-Chancellor, Kurukshetra University, and Dr. J.P. Leonard, Chief of the Teachers College, Columbia University Team in India.

Similar institutes were held at Baroda, Mysore and North Bengal Universities.

Institutes in Mathematics for college teachers were organised at Delhi, Gujarat, Madras and Patna Universities.

Summer Institutes for Polytechnic Teachers

Four summer institutes for polytechnic teachers, sponsored by the Ministry of Education and the Association of Principals of Technical Institutions, were organised at Chandigarh, Madras, Jadavpur and Ahmedabad, from June 15 to July 24. About 100 teachers from polytechnics of the four regions participated in each programme.

The United States Agency for International Development (USAID) provided the services of 16 American consultants in Electronic, Mechanical, Civil and Industrial Engineering—four for each centre.

High Energy Physics

The Institute of Mathematical Sciences, Madras, will hold its first summer school in High Energy Physics in Bangalore from August 24 to September 14, 1964, with financial assistance from CSIR.

The school will be inaugurated by Shri C. Subramaniam, Union Minister for Food & Agriculture and patron of the institute. Shri R. Venkataraman, Chairman of the Board of Governors of the institute, will preside over the inaugural function.

The following scientists from outside India will be the guest lecturers: Prof. K. Syamnazik, New York University, U.S.A.; Prof. E.R. Caianello, Naples University, Italy; Prof. R. Oehme, University of Chicago, U.S.A.; Dr. F. Calogero, University of Rome, Italy; Dr. A. Fujii, Tokyo University, Japan; and Dr. J. Lukierski, University of Wroclaw, Poland.

Supplementary lectures will be given by Drs. R. Vasudevan, N.R. Ranganathan, T.K. Radha and K. Venkatesan, who are members of the institute. A few scientists from other institutions in India are also expected to give talks on current topics.

'Science and the Nation'

The symposium, which was inaugurated by the President, Dr. S. Radhakrishnan, reviewed achievements and shortfalls in the application of scientific knowledge to various nation-building activities during the current Plan period. About 90 papers were received for discussion.

The symposium recommended the setting up of a separate Ministry of Science or a National Commission on Science to take care of the country's scientific and technological development.

It also called for greater collaboration between Afro-Asian countries in the development of science and technology.

The symposium was divided into eight sessions, each dealing with a specific developmental programme. The Chairman of the respective sessions were: Dr. K.L. Rao (Irrigation and Power); Prof. Humayun Kabir (Petroleum and Chemical); Shri P.S. Rao (Steel and Heavy Industries); Shri C. Subramaniam (Food and Agriculture); Shri Ram Subhag Singh (Transport and Communications); Dr. Sushila Nayyar (Health, Building and Town Planning); Shri T.T. Krishnamachari (Planning Survey, Organisation and Training in Science); and Dr. H.J. Bhabha (Science and International Relations).

President's Address

In his inaugural address, Dr. Radhakrishnan said that acquisition of a scientific outlook, temper and approach was more important than accumulation of scientific knowledge. He added that the development of a scientific technological order "does not commit us to spiritual aridity and inertia".

Shri Ashoka Mehta, Deputy Chairman, Planning Commission, and Dr. Hussain Zaheer, Director-General of CSIR, also spoke at the inaugural session.

Shri Mehta indicated that it might be possible to provide Rs. 400 to Rs. 500 crores—almost double the third Plan provision—for scientific research during the fourth Plan period, provided the scientists could give an assurance that the investment would yield "quick" results. Dr. Zaheer called for an integrated approach to scientific research in the fourth Plan.

ALL-INDIA* ENROLMENT, FACULTYWISE, AT UNIVERSITY LEVEL

1962-63 and 1963-64

Faculty	Total	P.U.C.	Pre-prof.	Inter	Graduate	Post-Graduate	Research	Dip./Cert.
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
Arts	5,35,291	6,79,049	1,19,091	1,32,902	—	—	1,06,617	1,06,093
	3,90,174	4,35,925	1,20,125	1,37,073	—	—	84,071	84,258
Science	1,21,971	1,30,578	26,573	25,266	—	—	19,833	18,837
	25,638	26,727	—	—	—	—	—	—
Commerce	68,589	73,015	—	—	8,932	5,566	—	—
	49,546	54,708	—	—	8,238	6,000	44	45
Education	38,837	41,116	90	130	3,460	2,192	17,996	18,225
	68,589	73,015	—	—	8,932	5,566	—	—
Engineering & Technology	49,546	54,708	—	—	8,238	6,000	44	45
	38,837	41,116	90	130	3,460	2,192	17,996	18,225
Medicine	5,524	5,624	—	—	181	281	—	—
	28,944	29,571	—	—	—	—	—	—
Agriculture	8,152	8,384	—	53	—	—	5,320	5,666
	12,72,666	13,84,679	2,65,879	2,95,424	20,811	14,039	2,33,881	2,33,124
Veterinary Science	5,524	5,624	—	—	181	281	—	—
	28,944	29,571	—	—	—	—	—	—
Law	8,152	8,384	—	53	—	—	5,320	5,666
	12,72,666	13,84,679	2,65,879	2,95,424	20,811	14,039	2,33,881	2,33,124
Others	8,152	8,384	—	53	—	—	5,320	5,666
	12,72,666	13,84,679	2,65,879	2,95,424	20,811	14,039	2,33,881	2,33,124
Total	12,72,666	13,84,679	2,65,879	2,95,424	20,811	14,039	2,33,881	2,33,124

* Includes enrolment in Intermediate Colleges.

STATEWISE AND FACULTYWISE UNIVERSITY ENROLMENT* IN INDIA

1963-64

State	Total Enrolment	Arts	Science	Commerce	Education	Engg. & Tech.	Medicine	Agriculture	Vet. Science	Law
		%	%	%	%	%	%	%	%	%
Andhra	73,072	16,128 22.1	35,552 48.7	4,809 6.6	1,322 1.8	5,510 7.5	6,158 8.4	1,283 1.7	738 1.0	1,215 1.7
Assam	46,239	31,931 69.1	8,253 17.8	2,706 5.9	306 0.7	983 2.1	999 2.2	329 0.7	246 0.5	486 1.0
Bihar	1,13,951	66,927 58.7	27,776 24.4	5,831 5.1	513 0.5	6,508 5.7	2,526 2.2	944 0.8	623 0.5	2,296 2.1
Gujarat	71,316	26,857 36.6	20,920 28.5	9,677 13.2	1,131 1.5	6,188 8.4	3,241 4.4	1,137 1.6	—	3,447 4.8
Jammu & Kashmir	11,407	4,982 43.7	4,049 35.5	213 1.9	434 3.8	782 6.8	635 5.6	312 2.7	—	—
Kerala	66,323	17,451 26.4	34,444 51.9	4,701 7.1	2,409 3.6	3,922 5.9	2,317 3.5	281 0.4	318 0.5	462 0.7
Madhya Pradesh	74,824	30,957 41.4	18,746 25.1	9,144 12.2	1,922 2.6	5,680 7.6	3,479 4.6	1,600 2.1	501 0.7	2,533 3.4
Madras	74,193	18,301 24.7	35,097 47.4	4,637 6.2	2,110 2.8	5,477 7.4	5,451 7.3	975 1.3	705 1.0	1,195 1.6
Maharashtra	1,51,207	54,048 35.7	47,173 31.3	25,562 16.9	3,312 2.2	5,783 3.8	6,778 4.5	3,382 2.0	326 0.2	4,810 3.2
Mysore	68,082	15,976 23.5	29,993 40.0	6,031 8.9	1,149 1.7	7,628 11.2	4,087 6.0	934 1.4	361 0.5	1,923 2.8
Orissa	22,379	9,604 42.9	7,548 33.7	565 2.5	399 1.8	1,420 6.3	1,508 6.7	748 3.3	238 1.2	349 1.6
Punjab	68,358	33,125 48.5	15,890 23.3	1,023 1.5	4,469 6.5	6,541 9.6	4,193 6.1	1,693 2.5	365 0.5	699 1.0
Rajasthan	37,809	14,883 39.4	9,275 24.5	6,526 17.3	1,006 2.7	2,482 6.6	1,494 3.9	1,103 2.9	192 0.5	848 2.2
Uttar Pradesh	3,18,165	1,43,981 45.3	96,431 30.3	23,570 7.4	4,000 1.3	7,186 2.2	5,239 1.6	25,944 8.1	840 0.3	4,973 1.6
West Bengal	1,58,440	75,524 47.7	41,710 26.3	23,895 15.1	2,061 1.3	6,185 3.9	4,430 2.8	451 0.3	171 0.1	3,645 2.3
Delhi	26,932	18,374 68.2	3,068 11.4	1,688 6.3	184 0.7	740 2.7	2,173 8.1	—	—	690 2.6
All India	13,84,607	5,79,049 41.8	4,35,925 31.5	1,30,578 9.4	26,727 1.9	73,015 5.3	54,708 4.0	41,116 3.0	5,624 0.4	29,571 2.1

*Includes enrolment in intermediate colleges.

Based on a preliminary statistical report prepared by UGC.

Campus News

Staff Hostel

Completed at a cost of Rs.2,40,000 and providing accommodation for 24 single teachers, the new staff hostel on the campus of Kurukshetra University will partially solve the acute shortage of residential accommodation for teachers of the university.

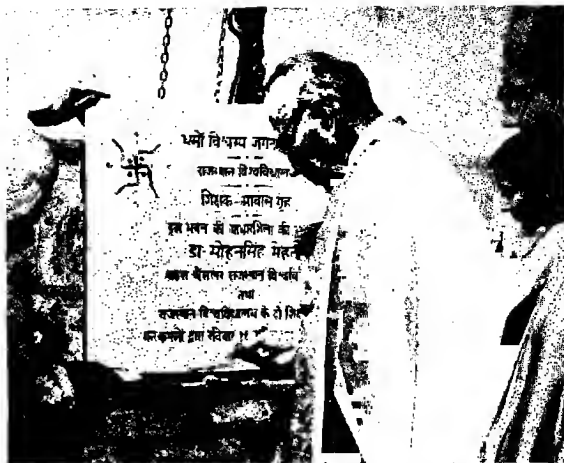
A scheme has also been approved for the construction of another staff hostel for married teachers with small families.

Gandhi Bhavan

The construction of Gandhi Bhavan has been completed at the Jyadpur University campus and it is expected to be commissioned soon. Acharya Vinoba Bhave laid the foundation stone of the Bhavan in June last year.

Library Building

The President, Dr. S. Radhakrishnan, declared upon the new library building of Sri Venkateswara University at Tirupati on July 12.



Dr. M.S. Mehta, Vice-Chancellor, Rajasthan University, lays the foundation stone of a teacher's hostel at the university campus.

NEW COURSES OF STUDY

Burdwan University intends to start a *Department of Botany* during the current session, in addition to the existing Departments of Science, Arts and Commerce.

Delhi University : proposes to start diploma courses in Ophthalmology, Radiology, Obstetrics and Gynaecology and Otolaryngology in the Faculty of Medical Sciences.

Jadavpur University is starting a degree course in *Library Science* from the current session.

Kerala University : An integrated two-year *pre-degree course* has been started this year. It includes the portions covered in the one-year pre-university and the one-year pre-professional courses. Students who pass this course with the appropriate optional subjects can proceed directly to professional courses in Engineering, Medicine, Agriculture, Veterinary Science, etc.

The *Engineering* course will revert to the old four-year pattern with effect from the academic year 1966-67. The present pre-pro-

fessional course in *Medicine* will be discontinued from June 1966.

UGC has approved the university's proposal for starting part-time courses in *Business Management* and *Industrial Management* with an annual intake of 30 students for each course.

Madras University : With a view to meeting the increased demand for trained personnel in town planning the All-India Council for Technical Education has approved a scheme for the institution of full-time as well as part-time courses in *Town Planning*, at the School of Architecture, Madras University. The courses, with an annual intake of 20 students, are to be started from the academic session 1964-65.

The School of Architecture, Madras University, will serve as a regional centre for conducting courses in *Town Planning* and the students sponsored by the adjoining States of Kerala, Andhra and Mysore etc. will be eligible for admission to the course.

M.S. University of Baroda plans to institute post-diploma courses in Automobile Engineering and Refrigeration & Air-conditioning, and part-time courses for State diplomas in Engineering.

Osmania University : A two-year post-graduate *Master of Business Administration* course (day-time) has been introduced with effect from July 1964.

Punjab University : A diploma course in *Public Health* has been instituted.

Punjab Agricultural University has decided to start two-year M.Sc. courses in *Zoology* and *Botany* at the College of Agriculture, Ludhiana, from July 1964. To start with, there will be only 15 seats in each course, which for the present will be reserved for the nominees of the Punjab Education Department.

There will also be M.Sc. (Honours) courses in *Zoology* and *Botany* for students who have already obtained B.Sc. (Honours) in these subjects. The duration of each course will be one year, and

the students will be required to devote their full time on a research problem.

M.Sc. (Agri.) classes in *Animal Husbandry*, *Agronomy*, *Botany*, *Genetics and Soils* are being started at the College of Agriculture, Hissar. For some time, however, the classes would be held at the Ludhiana campus because the hostel facilities at Hissar are not yet adequate.

From November 1964, the university will enrol candidates for the Ph.D. degree. The total number of seats available in the different departments is 20.

A school of *Home Science* and a College of *Agricultural Engineering* would start functioning at Ludhiana from the next academic year.

Rajasthan University : Honours courses have been introduced in undergraduate colleges in the following subjects : Economics, Political Science, History, English, Hindi, Mathematics, Chemistry, Philosophy, Sociology and Accountancy.

The University Law College has started a new diploma course in *Criminology and Criminal Administration* for post-LL B. students.

Shriaji University has started post-graduate courses in Chemistry, Physics, Botany, Zoology and Mathematics from July 1964, with an overall intake of 54 students.

Sri Venkateswara University proposes to start this year a *Department of Music* and to offer instruction for the degree of Master of Music.

Permission has been accorded to the Adoni Arts & Science College, Adoni, to start the *B. Com.* course.

From this year, the duration of the B.A. (Evening) courses has been reduced from 4 years to 3 years—the duration prescribed for the regular day courses.

SDNT University : The Department of *Nursing* of the SDNT College for Women, Bombay, has been converted into a full-fledged college named the Leelabai Thackersey College of Nursing for Women ; and the Department of Education, SDNT College for Women, Poona, has been converted into the SDNT College of Education for Women.

The SHPT School of *Library Science*, Bombay, has upgraded its

course which will now lead to the degree of Bachelor of Library Science.

The post-graduate course in *Nutrition* will commence at the College of Home Science of this university from July 1964.

S. V. Vidyapeeth : Approval has been received from UGC for the establishment of a *Department of Rural Development*. In addition to post-graduate teaching and research the proposed department will promote extension activities in rural areas.

Visva-Bharti : Proposes to institute B.Sc. (Honours) courses in Botany and Zoology.

UNIVERSITY NEWS is issued every alternate month. Price per copy: 50 paise plus postage. Annual subscription: Rs. 3/5h. 6/1 (by surface mail); Rs. 6/5h. 14/8 4 (air-mail). Remittance should be made by Money Order or Postal Order in the name of the Editor, UNIVERSITY NEWS c/o the Inter-University Board of India, House Avenue, New Delhi-1.

NEW COLLEGES AND AFFILIATIONS

Burdwan University has given affiliation to two new undergraduate colleges—one in the Burdwan district and the other in the Hooghly district from the academic session 1964-65.

Delhi University : Three new colleges—one for girls—have been set up in Delhi to cope with the increasing rush of admissions. About 1,000 students have been enrolled in the three colleges.

Indore University : Sixteen colleges, having a total of about 12,000 students in Indore district, discontinued their affiliation with Vikram University and came under the purview of the new Indore University which began its first academic year on July 1. Of the 16 colleges, eight will be constituent colleges.

Rajasthan University : The Malviya Regional Engineering College, Jaipur, was formally inaugurated by the Chief Minister of Rajasthan on July 14, 1964.

Saugar University : With the establishment of Ravi Shanker University, Raipur and Jiwaji University, Gwalior, with effect from May 1964, 37 colleges have been transferred to the jurisdiction of the new universities—35 to Ravi Shanker and 2 to Jiwaji University.

Sri Venkateswara : Consequent on the starting of Andhra Pradesh Agricultural University this year, the Andhra Veterinary College, Tirupati, and the Sri Venkateswara Agricultural College, Tirupati, formerly affiliated to this university, have been transferred to the Agricultural University.

ADMISSIONS

Osmania University : With effect from June 1964, students who have passed pre-professional or Intermediate examinations will not be eligible for admission to the second year of the three-year degree course.

Sri Venkateswara : Admissions to special courses will henceforth be made in the second year of the three-year degree course on the basis of the candidates' performance in the first year. Again, their continuance in the special course during the third year will depend on their passing the special papers prescribed for the second year. There will thus be no special paper in the first year of this three-year degree course.

EXAMINATIONS

Agra University has made it compulsory for regular students to secure at least 25 per cent of the aggregate marks in at least three periodical tests, including one examination covering all subjects. To be eligible for the university examinations.

Osmania University has decided to allow NCC cadet instructors recruited during the national emergency to appear as private candidates at the university examinations in the Faculty of Arts.

The period of service rendered by medical graduates in the Army Medical Corps during the national emergency will be treated as equivalent to housemanship.

Foreign and Indian students who had their entire schooling abroad will be exempted from the study of a compulsory Indian language for the pre-university examination.

Scientific and Technical Personnel

The out-turn of scientific and technical personnel holding degrees and diplomas has increased three to four times between 1960 and 1963. As a result, more than 200,000 engineers are available today compared to about 60,000 in 1960.

According to the survey conducted by the National Register Unit of CSIR, two-thirds of the scientific and technical personnel in India are employed in the public sector.

The employment of graduate engineers in the private sector widely varies from 10 per cent in civil engineering works to about 45 per cent for chemical engineers.

Most of the post-graduate scientists are working in government organisations and educational institutions; only about 5 per cent of them are employed in the private sector.

The survey reveals that industrial employment accounts only for a small fraction of the available scientists and engineers. Many of them are working in technical fields outside industry, and are thus contributing only indirectly to industrial activity. This is in sharp contrast with other industrially developed countries. For instance, in the U.S.A., 40 per cent of the scientists and 60 per cent of the engineers are working in the manufacturing industry.

Excess of Engineers

The Institute of Applied Manpower Research, New Delhi, has estimated that there will be a surplus of 30,000 engineers in the fourth Plan if the revised targets for expansion of engineering colleges and polytechnics, fixed in response to the national emergency, are implemented during the current Plan period.

According to the institute, the supply of engineers will increase from 246,000 to 443,000, that is by 197,000 during the fourth Plan period, whereas the demand will grow by only 167,000—65,000 graduate engineers and 102,000 diploma holders—during the same period.

Botanists in India

According to the National Register Unit, there were about 5,000 post-graduate botanists in India in 1960, of whom 3,400 were registered with the unit.

About 15 per cent of the registrants possessed a doctorate degree in the subject. Seventy-five persons (2 per cent) possessed a Master's degree in alternative subjects, of which Agriculture accounted for 51.

Of the 5,000 botanists estimated in the age group below 60, 55 per cent were below 30, 29 per cent in their thirties, and 16 per cent in the age group 40-60.

The distribution of the botanists according to the type of employment organisation, shows that 61.2 per cent were employed in universities and colleges, 4.9 per cent in schools, 17.1 per cent in research institutions and 11.1 per cent in government services. Only 1.3 per cent were employed in industries.

Persons domiciled in U.P. constituted about a fourth of the total registrants. A study of the botanists' mobility pattern shows that Maharashtra, Delhi, Madhya Pradesh and Bihar have attracted large numbers from outside, whereas the outflow from Uttar Pradesh, Kerala, Andhra, Madras, Mysore and Punjab is fairly marked.

C.S.I.R. Annual Report

According to the annual report of the Council of Scientific and Industrial Research for 1963-64, published recently, there are 29 national laboratories, 3 research units and 10 research committees functioning under the Council.

During the year under report, 518 research schemes were in progress and 652 research papers were published. More than 650 fellowships were awarded under various research schemes. The number of *ad hoc* fellowships awarded during 1963-64 rose from 813 to 1822, of which 259 were awarded in the national laboratories and the rest in universities, colleges and other research institutions in the country.

Admissions to Technical Courses on All-India Basis

The All-India Council for Technical Education has recommended the removal of inter-State restrictions on admissions to technical institutions in the country.

According to the Council, these admissions should not be restricted on the basis of domicile or nativity and should be made on the basis of merit. As many ex-State students as possible should be admitted on merit, reaching up to 25 per cent in course of time.

The Council's recommendations, which are in conformity with the view expressed by the study team on national integration appointed by the Union Home Ministry, have been recently communicated to all State Governments and universities for implementation.

International Geographical Congress

Over 2,000 delegates from 63 countries, including India, attended the 20th International Geographical Congress held in London from July 21 to 31. The congress was inaugurated by Queen Elizabeth.

The following main themes were covered by the 1,000 scientific papers presented to the congress: Geography of Population and Settlement, Economic Geography, Climatology, Hydrology, Glaciology, Oceanography, Biogeography, Geomorphology, Historical Geography, Applied Geography, Regional Geography, and Cartography.

Among the Indian delegates to the London congress were Prof. O. Bhargava, Government College, Ludhiana; Dr. G.S. Gosai, Panjab University, Prof. D. N. Kar, Presidency College, Calcutta; Prof. Muzaffer Ali, Saugar University, Dr. M. Shafi, Aligarh Muslim University; Dr. R.L. Singh, Banaras Hindu University; Dr. S.M. Alam, Osmania University; Dr. S.P. Chatterjee, of the National Atlas Organization, Calcutta; Dr. (Miss) P. Sen Gupta of the Office of the Registrar-General of India, New Delhi; Shri L.S. Bhat, of the Indian Statistical Institute, New Delhi; and Shri Sameshwar Dayal, of Maps and Atlases Publication Ltd., Madras.

The congress is held every four years. The first meeting took place in 1871.

Indian Scientist in Britain Makes Scientific History

German Fellowships

(Contd. from page 7, col. 3)

Dr. Jayant Vishnu Narlikar, the 25-year-old Indian mathematician, at present a Fellow at King's College, Cambridge, made scientific history recently when he presented, with Prof. Fred Hoyle, Plumian Professor of Astronomy and Experimental Philosophy at Cambridge, the paper on a new theory of gravity to the Royal Society in London.

Dr. Narlikar has been at Cambridge since 1957 and gained his doctorate last year.

The new theory evolved by Narlikar and Hoyle is an improvement on the 1916 Einstein theory of gravity, and has already become a sensation in the world of science.

According to Einstein, matter behaves as it does because of the properties of space and time. But according to the new theory, gravity is something belonging to matter. If all the matter was removed, gravity would also cease to exist. In other words, gravity depends on the density of matter in the universe.

At the Royal Society meeting, Hoyle and Narlikar pointed out that the mathematical formulae used by Einstein to describe gravity could as well describe anti-gravity by changing an arbitrary minus sign to a plus. This, as Hoyle put it, would make the apple fly away from Isaac Newton instead of falling on his head.

Future Plans

Dr. Narlikar said in an interview in London that he would be working in Cambridge for the next two-three years before returning to India, where he would work at some university.

"Mathematics is my first love," he said. "Right from my school-days I liked it."

It was after gaining his B.Sc. in 1960 from Banaras Hindu University, where his father was Professor of Mathematics, that young Narlikar went to Cambridge and decided that he wanted to work in the field of astronomy. He showed his genius in 1961, when he attended a conference on "Evidence for Gravitational Theories" in Italy. In 1962, he represented Cambridge University at the Relativity Conference in Vienna, and again, in 1963, at the World Astronomical Conference in Greenwich.



Dr. J. V. Narlikar

Fourth Regional Medical College

Named after the Hindu saint, the Lord of Medicine Dhanvantari, the fourth regional post-graduate medical college and hospital in the country was inaugurated on July 13 by the President, Dr. S. Radhakrishnan. The other three institutions are in Madras, Chandigarh and Calcutta, besides the All India Medical Institute in New Delhi.

Speaking on the occasion, the President said that Indian students were in no way inferior intellectually to those in other countries, but that was not enough if they wanted to keep abreast with modern developments. He reminded the students that whereas in advanced countries people suffered because of affluent means of living, people in India suffered because of poverty.

The Union Health Minister, Dr. Sushila Nayar, who presided over the function, said it had been decided to develop the 160-acre area around the college into a regional institute of post-graduate medical education and research, and name it after the late Shri Jawaharlal Nehru.

The fellowships are open to scholars in all disciplines who meet the following requirements: (a) have successfully completed a full course of studies in their field of specialisation and hold degrees or diplomas equivalent to the German doctorate or "Staatsexamen" and, in the case of medical studies, have completed the required clinical housemanship; (b) have been employed in teaching or research at university level at least for two years; (c) have sufficient knowledge of German; and (d) are not older than 35.

September 25, 1964 is the last date for receipt of applications on prescribed forms, copies of which can be obtained from the German Academic Exchange Service, New Delhi or one of the Consulates of the Federal Republic of Germany in Bombay, Calcutta or Madras.

Royal Society Bursaries

The Royal Society and Nuffield Foundation invite applications under the Commonwealth Bursaries Scheme, from scientists of proven worth for awards to help them pursue research in natural sciences in a Commonwealth country for periods of 2 to 12 months. Travel and maintenance grant is given at a rate depending on the living cost in the country concerned, on the basis of £600 a year in Britain.

For visits during January-June 1965, applications should be submitted not later than September 15, 1964, to the Executive Secretary, Royal Society, Burlington House, London, W.1, from whom application forms and fuller particulars may be obtained.

In 1963, 24 awards of bursaries were made (against 56 applications considered)—15 for visits to the United Kingdom (4 from Australia, 1 from Canada, 5 from India, 1 from Jamaica, 1 from New Zealand, 1 from Nigeria, 1 from Sierra Leone and 1 from Singapore) and 4 for visits between countries of the Commonwealth other than the United Kingdom.

Facilities for Higher Education in the U.S.A.

The U.S.A. has evolved a system under which it is possible for virtually every qualified school graduate to complete college education if he wants it—even in an era of rising costs and crowded universities.

The burden placed each September on the country's 2,000 institutions of higher learning can best be understood when it is realised that primary and secondary education is not only free in the United States, but also attendance is compulsory until one reaches the age of 16.

In addition to private universities, States and cities maintain universities, which are supported mainly by public funds. There are 700 such institutions in the United States, with 60 per cent of all students attending them.

Scholarships

There are literally thousands of scholarships available from both State and philanthropic institutions, but these normally take care only of tuition costs. It is primarily on the college loan that the student without funds must rely. Here, again, the Government lends a hand. The most notable assistance available to the student is a loan under the National Defence Education Act of 1958. These loans, by the end of 1962, amounted to 220 million. Should the student go into teaching, the loan is reduced by 10 per cent for each year he is in that field, up to five years.

In the private assistance sector, one of the most successful experience has been that of the United Student Aid Funds, a non-profit corporation which uses its \$50 million reserves not as loans but to guarantee loans obtained from other sources. Universities also maintain their own loan programmes, and in many cases colleges offer the student a "package" made up of a scholarship, a student loan and a job.

Educators and economists in America agree that it is worth providing all these facilities at a great cost, because latest available figures show that the male secondary

school graduate in the United States will earn \$ 257,557 from the age of 18 to the time of his death, while the college graduate will earn \$ 435,242—roughly \$ 178,000 more on an investment of \$ 5,000.

Indian Students in Britain

There were 1,543 Indian students—1,385 men and 158 women—at British universities in the academic year 1963-64, out of a total of 14,117 foreign students.

Indians accounted for the largest number of foreign students, followed by the U.S.A. 1,295; Nigeria 1,022; Pakistan 749; Canada 652; Iraq 530; Egypt 452; South Africa 423; Australia 414; Kenya 393; Malaya 331; and Ghana 301.

India also accounted for the largest number of postgraduates—935.

Subjectwise analysis of the 1,543 Indian students is: 167 Social Studies, 126 Medicine, 15 Agriculture and forestry, 261 Pure Science, 19 Dentistry, 226 Arts, 725 Technology, and 4 Veterinary Science.

Newest College at Oxford

Oxford University's newest college for men, St. Catherine's was recently opened to the public for the first time.

The college, built at a cost of £ 2,750,000, will have places for 400 students—undergraduates and graduates—half of whom will be reading Science or Mathematics.

The Queen laid the foundation stone of the college in November 1960. It will be opened officially in October by Mr. Harold Macmillan, former Prime Minister, who is Chancellor of the University of Oxford.

Hindi in British College

New three-year courses in a number of languages—including Hindi—and related social studies will start this autumn at the Holborn College of Law, Languages and Commerce, one of the main colleges run by the London County Council. The college already offers tuition in a choice of 24 languages to over 2,000 students.

The new courses are intended for young people aiming to take administrative posts in developing countries or to work with organizations engaged in voluntary service overseas.

Study of a language covered by the new courses will be combined with the study of legal, governmental and economic systems, and the cultural background of the countries concerned.

Rs. 60 Crores a Year for Growth of Science

The Federal Government of West Germany and the Lander (State) Governments have agreed to provide a total of DM 500,000,000 (approximately Rs. 60 crores) per year for the advancement of science. Under this agreement, which will be valid till the end of 1966, the Federal Government will contribute half the amount. Further expansion of scientific academies will be the main item of expenditure.

More Staff for Dutch Universities

The Dutch Minister of Education, Arts and Sciences, Mr. T.H. Bot, announced recently that the staff of Dutch universities would be increased by more than 30 per cent in the next four years. He said that the Government took seriously its duty to take care of university education.

350-Year Old University

On the occasion of the 350th anniversary of the foundation of the Groningen University, the Netherlands Postal Services issued a commemorative stamp on June 16, bearing the words "Academia Groningena" and the dates 1614-1964.

Commonwealth Books Exhibition

A Commonwealth books exhibition, covering a wide range of subjects, is to be held in September at Marlborough House, the Commonwealth centre in London. It is being organised by Britain's National Book League.

The exhibition will include classics of Commonwealth literature and examples of new writings from various Commonwealth countries. Also on display will be books on travel and exploration and on the history and geography of Commonwealth countries. Biographies and autobiographies of Commonwealth personalities will be among other publications on view.

Post-Graduate Awards in Canada

The Canadian Universities Foundation has brought out a handbook under the title *Awards for Graduate Study and Research, 1963*

The handbook gives nearly 1,600 entries, including descriptions of scholarships and fellowships for Master's and doctoral work; awards for post-baccalaureate professional training in fields such as education, library science, nursing, social work, etc.; research and study-leave grants at the post-doctoral and senior professional level. Some award programmes for short-term and summer study are also listed.

The entries are in English and French, depending upon the language of instruction in the institution where the awards may be held.

Copies can be obtained from the Canadian Universities Foundation, 75 Albert Street, Ottawa 4, Canada, at \$3 per copy.

Post-Graduate Studies in Australia

The Australian Office of Education has published an 86-page booklet, *Some Opportunities for Post-Graduate Study at Australian Universities*, giving details which should prove helpful to students from overseas. The departments of each university are listed, with the names of their professors and an account of the studies in which they are specialising.

PUBLICATIONS

Soviet Textbooks

The Trade Representation of the U.S.S.R. in India has presented 50 volumes of Soviet textbooks on science and technology, published in Moscow in English (translated from Russian) to the library of the Inter-University Board of India and Ceylon, New Delhi. A list of these commendable books, prices of which range between Rs. 2.50 and Rs. 9.00, can be had from the Secretary, Inter-University Board, Rouse Avenue, New Delhi-1, by those who are interested in the books.

It is understood that in order to produce moderately-priced Russian textbooks and standard works in India, a 10-man board, consisting of five Russian and five Indian experts, is being set up. This board will be more or less on the pattern of the Indo-American board for the production of low-priced educational books with PL-480 funds.

India also has an arrangement with the United Kingdom for the production of cheap books for Indian students.

C.S.I.R. Journal on Biochemistry

The Publication and Information Directorate of CSIR has added a new journal to the family of research periodicals issued by it—*Indian Journal of Biochemistry*. The new journal, published quarterly, is devoted to original research communications in the field of Biochemistry and replaces the *Annals of Biochemistry and Experimental Medicine*, previously issued by the Indian Institute for Biochemistry and Experimental Medicine, Calcutta.

Notable among the papers appearing in the first number (March 1964) are: Studies on intestinal transaminases with special reference to human intestinal glutamic-aspartic transaminase; studies on ubiquinone saturated in the side chain; Metabolic relationship between dietary protein and iron; and Fatty acid composition of human bile lipids.

Book Bank Drive

The Students' Aid Society, Bangalore, has plans to launch a country-wide drive to expand its book bank project, so as to establish as many banks of technical and medical textbooks as possible by the 75th birth anniversary of the late Shri Jawaharlal Nehru, which falls on November 14, 1964.

The society has so far established book banks in 48 institutions, including 34 engineering colleges and polytechnics, 7 science colleges and 2 commerce colleges.

Special committees are proposed to be set up in all States and Union Territories to administer the book banks, and the donations collected in a particular State will be used in that State.

The need for the establishment of book banks or textbook lending libraries is deeply felt particularly by students with limited resources, and the society's work in this direction has been widely acclaimed.

Youth Chronicle

Youth Chronicle, a bimonthly publication of the Students' Information Centre, is the latest addition to the educational periodical literature in India. In keeping with the objectives of SIC, the journal covers topics bearing on education both at home and abroad. Its latest issue (Vol. I No. 2, June-July) contains articles on Problem of Admissions to Indian Universities (Dr. B. D. Laroia), Academic Freedom in Britain (Walter James), Indian Students in Britain (Willem van der Eyken), Admission to German Universities (Alexander Petri), besides a "Letter from Africa". A special feature is the photo-series on the late Shri Jawaharlal Nehru, depicting his variegated interests and achievements.

National Formulary

The second edition of the *National Formulary of India* is now under print and will shortly be available for use. The formulary was compiled by a committee under the chairmanship of Dr. B.B. Yodh, an eminent physician and former Professor of Medicine at the Government Medical College, Bombay.

I.U.S.B. Plan to Raise Combined Cricket Team

The Inter-University Sports Board proposes to raise a combined universities' cricket team to participate in the Moin-ud-Dowla Gold Cup Cricket Tournament, likely to be played at Hyderabad in the second fortnight of October 1964.

The combined team will also play against the Ceylon Cricket Team visiting India in December this year. The Cricket Control Board has agreed to assign a fixture to IUSB against the visitors.

At the 24th annual meeting of IUSB, held at Chandigarh in April last, it was decided to raise combined university teams to participate in various national tournaments.

National Institute of Sports

The National Institute of Sports, Patiala, has decided to introduce, during the current year, three-year courses in Gymnastics and Athletics.

The institute, the only one of its type in Asia, at present offers regular one-year courses in Athletics, Gymnastics, Hockey, Cricket, Football, Volleyball, Wrestling, Tennis and Badminton. Besides, *ad hoc* courses are available in Swimming, Basketball and Table Tennis.

The minimum educational qualification for admission to the institute is matriculation.

There is no tuition fee, nor any charge for lodging and medical aid. Even boarding is free for those who are attending three-year courses, while others have to pay Rs. 70 per month.

Large-Scale Expansion of Sports Facilities Likely

The tentative programme drawn up for the development of sports during the fourth Five Year Plan envisages large-scale Central assistance to States for providing more playgrounds and sports equipment in educational institutions.

About 1,500 colleges, 16,000 high schools and 12,000 middle schools would be covered by schemes for the improvement of playground facilities.

Greater emphasis would also be laid in the fourth Plan on mountaineering activity on scientific lines. A tentative provision of Rs. 19 lakhs has been made for developing a Western Himalayan Mountaineering Institute.

As against the total third Plan provision of Rs. 12 crores for physical education, sports and youth welfare, the proposed programme envisages an outlay of Rs. 22 crores.

► As a step towards promoting sports, the Rajasthan Government has exempted all national events and State tournaments from entertainment tax.

Delhi Wins Azad Trophy

Delhi University has won the "Abul Kalam Azad Trophy" for the year 1962-63, Panjab University being the runner-up, and Bombay University taking the third place.

The trophy, which was instituted in 1956-57, is awarded to a university which in a particular year sends the largest number of students in the largest number of games to national/international sports events. The object of the award is to arouse the interest of university students in sports and games.

PERSONAL

Shri Lal Bahadur Shastri, Prime Minister of India, has been unanimously elected *Acharya* (Chancellor) of Visva-Bharati w.e.f. July 26, 1964 for a period of three years. The office was previously held by the late Shri Jawaharlal Nehru.

Shri O. Pulla Reddi, I.C.S. (Retd.) has been appointed the first Vice-Chancellor of Andhra Pradesh Agricultural University w.e.f. June 12, 1964.

Shri Tara Chand Shrivastava, retired Judge of the Madhya Pradesh High Court, has been appointed Vice-Chancellor of Jabalpur University w.e.f. June 27, 1964.

Prof. Ram Behari, until recently Director, Correspondence Courses, Delhi University, has been appointed Vice-Chancellor of Jodhpur University w.e.f. July 15, 1964.

Dr. N.R. Tawde has succeeded Shri S.R. Dongerkery as Vice-Chancellor of Marathwada University. He assumed office on June 19, 1964.

Dr. N.V. Gadgil, formerly Governor of Punjab, assumed charge of the office of the Vice-Chancellor, Poona University in July 1964.

Dr. V.C. Vamane Rao, has succeeded Shri S. Govindarajulu Naidu as Vice-Chancellor of Sri Venkateswara University w.e.f. June 1964.

Shri M. Sriramulu, Special Officer, Andhra Pradesh Agricultural

University, has been appointed the first Registrar of the university w.e.f. July 10, 1964 for one year.

Shri P. Mallikarajunappa, has assumed charge as the first Registrar of the newly-founded Bangalore University w.e.f. July 15, 1964.

Shri K.R. Ramachandran, I.A.S. has joined Mysore University as its Registrar w.e.f. July 1964.

Shri P.B. Mitra, formerly Principal, Chandernagore College, has been appointed Registrar of North Bengal University w.e.f. July 1964.

Dr. G.S. Sharma, Director of the Law School, Rajasthan University, is at present visiting professor at the University of Singapore, teaching Legal Philosophy and Constitutional Law.

Shri V.K. Bawa, Deputy Secretary in the Ministry of Education, has been appointed Secretary to the All India Council of Sports vice Shri P.K. Kathpalia.

Mr. William Herbert Earle, 51, has succeeded Mr. H.P. Croom-Johnson, as the British Council's Representative in India. Mr. Earle served earlier in Cairo, Iraq, Aden, Syria, and Pakistan.

Mr. Croom-Johnson left Delhi on July 24.

THE

CONTEMPORARY
ARTICLES OF
OPINION



1

AMERICAN

REVIEW

THOUGHT-PROVOKING, EDUCATIVE QUARTERLY



THE AMERICAN REVIEW is a quarterly magazine published in English by the United States Information Service for circulation in India. Each issue consists of about 100 pages.

THE AMERICAN REVIEW is a thought-provoking magazine containing authoritative articles by eminent writers on all aspects of American life and civilization. These articles are representative examples of opinion and analysis current in the United States on many subjects of intellectual interest.

The subjects covered include art, literature and philosophy, economics, science, sociology, education and law. The magazine has special appeal to students of American social history and culture.

THE AMERICAN REVIEW promotes understanding between the people of the United States and India by highlighting the democratic way of life and the interests and aspirations shared by the two countries.

Subscription Rates :

One Year (4 Issues) Rs. 3/- Two Years (8 Issues) Rs. 5/-

Subscribe only through your nearest Regional Distributor :

● DELHI : PATRIKA SYNDICATE Pvt. LTD., Gole Market, New Delhi-1. ● BOMBAY : LALVANI BROS., Taj Building, 210 Dr. D. N. Road, Bombay-1. ● CALCUTTA : PATRIKA SYNDICATE Pvt. Ltd., 12/1, Lindsay Street, Calcutta-16. ● MADRAS : THE SWADESAMITRAN LTD., Victory House, Mount Road, Madras-2.



Eastern Economy Editions

RESEARCH IN EDUCATION

JOHN W. BEST, BUTLER UNIVERSITY

Introduces the student to the fundamentals of research techniques. Basic Statistical concepts, simply presented, do not require mathematical sophistication to be understood. 320 pp.

3E list price Rs. 9.00

(Original U.S. list price \$ 6.75)

THE DEVELOPMENT OF MODERN EDUCATION, 2nd Ed.

FREDERICK EBY, UNIVERSITY OF TEXAS

Interprets the economic, political, religious, social, and industrial forces that have influenced the development of education in theory, organization, and practice. Treats elementary, secondary and higher education from the time of the North European Renaissance to the present day. 719 pp.

3E list price Rs. 12.60

(Original U.S. list price \$ 8.25)

STATISTICAL METHODS FOR SOCIAL SCIENTISTS

LILLIAN COHEN, VASSAR COLLEGE

Designed as an introduction to statistics for social scientists, this book deals with the collection, description, and analysis of data whose occurrences or measurements have been counted. It is simple enough to be understood by anyone who has taken an elementary algebra course. Problems are included in the exercises and examples are selected where statistical techniques are used in a theoretical framework. 192 pp.

3E list price Rs. 7.50

(Original U.S. list price \$ 5.95)

INTRODUCTION TO SOCIAL WELFARE, 2nd Ed.

WALTER A. FRIEDLANDER, UNIVERSITY OF CALIFORNIA, BERKELEY

The new edition provides an organic and comprehensive introduction to the philosophy, historic development, and present system of social welfare. Deals with the latest methods of social, group, and case work, community organization, social welfare administration and research. 569 pp.

3E list price Rs. 12.60

(Original U.S. list price \$ 7.95)

CONCEPTS & METHODS OF SOCIAL WORK

EDITED BY WALTER A. FRIEDLANDER, UNIVERSITY OF CALIFORNIA, BERKELEY

Analyzes social case work, social group work, and community welfare organization, showing their inter-relationships. The text includes problems, questions, and actual case studies. 308 pp.

3E list price Rs. 9.75

(Original U.S. list price \$ 6.75)

PRENTICE-HALL OF INDIA (PRIVATE) LTD.

M-97, AGGARWAL BUILDINGS, CONNAUGHT CIRCUS, NEW DELHI-1

To our readers...

We owe it to our readers to explain why the publication of "University News" had to be discontinued for almost a year.

Dr. B.D. Laroia, who was the Editor, Printer and Publisher of this magazine left the Inter-University Board of India and Ceylon in September last year to go to Bangalore as Vice-Chancellor of that newly-started university. Owing to a number of reasons there was considerable delay in appointing a successor to him. For almost nine months therefore, he continued to discharge the duties of the Secretaryship of the Inter-University Board of India and Ceylon in addition to his duties as a Vice-Chancellor. In the very nature of things it was not possible for him to look after the publication of this journal as he had been doing till then.

The fact that it has been decided to resume publication of "University News" is a tribute to the services rendered by this magazine under the able editorship of Dr. B.D. Laroia. In recognition of this service, it has been decided by the Inter-University Board to convert this magazine into a monthly publication with effect from January 1966. After this issue, the next issue will appear in November and the one after that in January 1966. With effect from January it will appear regularly every month. Further details with regard to this change-over will be given in the next issue.

If some of our readers can suggest to us how this publication can be made more useful to them and to the University world, we shall be only too pleased to hear from them. It is hoped that "University News" will, as hitherto, continue to enjoy the esteem and patronage of all of its readers.

Amrik Singh

CORRESPONDENCE COURSES IN HIGHER EDUCATION

Considering the large scale demand for expansion of facilities at all stages of education, especially at the University stage, some type of a non-formal education to supplement the present formal education being imparted in universities and colleges has become necessary. The Planning Commission, being aware of this need, has sent the following note on correspondence courses.

In a period of 15 years the college-going population in India has increased by something like 300 per cent, i.e. from 4 lakhs in 1950-51 to an estimated figure of 17 lakhs in 1965-66. Estimating on the basis of a 10 per cent rate of growth in the enrolment of students in colleges, by 1970-71 there would be about 25 lakhs of students in all courses. It is felt that it may not be possible to find the money for buildings, provision of proper equipment, laboratories, libraries, etc for this increasing number, quite apart from the problem of making up the backlog in respect of these items. On the other hand this great hunger for education has also to be satisfied.

The way out of this dilemma of numbers is through non-formal education. The method of supervised correspondence study is now widely used in several countries of the world such as the U.K., U.S.A., U.S.S.R., the Scandinavian countries, the Netherlands, West Germany, New Zealand, Ethiopia, South Africa, Indonesia, Japan, Malaysia and several countries in the Commonwealth. In the USA there are 56 universities or institutions which are imparting education through correspondence to several million students every year. In UK 98 per cent of all chartered accountants prepare for their examination by correspondence. Something like 40 per cent of the 22 lakhs of students undergoing higher education in the Soviet Union are getting their instruction through correspondence courses.

Apart from economising in the cost of education without affecting

the standards, correspondence courses are also an instrument in the promotion of social justice by catering to the needs of those who, for economic and other reasons, have left full time educational institutions to take up employment. Both experience and research have proved the effectiveness of correspondence courses. Often the achievement of students through correspondence courses is equal to and sometimes better than that of class-room students in identical subjects.

The Report of the Expert Committee on correspondence courses, under the chairmanship of Dr.D.S. Kothari, states in unequivocal terms the need for the institution of such courses. The pilot project taken up by the Delhi University in this behalf has been a real success. The number of fresh admissions to the correspondence courses at the under-graduate level in humanities has steadily increased from 1100 in 1962-63 to 1400 in 1963-64 and 1927 in 1964-65. It is expected to increase to about 3000 in 1965-66.

The UGC, the Planning Commission and the Ministry of Education are now thinking of taking up a massive programme of correspondence courses in the Fourth Five Year Plan. Correspondence courses will be available for higher education, teacher education, technical education and even for secondary education. Out of an anticipated additional enrolment of 5 lakhs students at the university stage in the Fourth Plan, it is expected

Contd. on page 13 col. 3

Adult Education Department in Universities

The All-India Conference on University Adult Education which ended its four-day session in Bhopal on July 8, 1965 called upon the Universities in India to establish departments of Adult Education with the aim of making their services available to as large a section of the adult population as possible.

The Conference which was convened jointly by the Indian Adult Education Association and the Rajasthan University, with financial assistance from the UGC, was attended by about a dozen Vice-Chancellors and 40 representatives of universities, UGC, IUB and the Education Commission. Dr. M.S. Mehta, Vice-Chancellor, Rajasthan University and President, Indian Adult Education Association presided.

The Conference urged the universities in India to assume an increasing role in adult education by making a determined effort to inspire the students and teachers to undertake adult education work.

The Conference decided to set up an organisation to be known as "The Indian Conference on University Adult Education" with the objective of advising & assisting the universities in India in promoting adult education work in all its aspects. It would also function as a clearinghouse for exchange of ideas and experience by universities which are presently conducting Extension programmes or wish to initiate Extension programme in various fields.

A seven man organising committee was set up for the purpose with Dr. M.S. Mehta as Chairman. The members of the Committee include Dr. C.D. Deshmukh, Shri H.M. Patel, Shri S.S. Bhandarkar and Shri J.P. Naik. Dr. Amrik Singh, Secretary Inter-University Board and Shri S.C. Dutta, Honorary General Secretary, Indian Adult Education Association will be the Secretaries.

The Conference was inaugurated on July 5 by the Chief Minister of Madhya Pradesh, Shri D.P. Mishra, when he exhorted every new gra-

duate to make at least 10 people literate. Dr. K.C. Reddy, Governor of Madhya Pradesh, addressing the Conference at the closing session, asked universities to chalk out programmes associating students and teachers with a countrywide campaign for wiping out illiteracy.

Rajasthan University Department of Adult Education

Started in 1962, the Department of Adult Education in the University of Rajasthan is a pioneering effort in the country in the field of continuing education for adults by making available the resources of higher learning and other facilities of the university to the community. The services of Canadian expert adult educators are being made available to the university under the Colombo Plan Project.

Apart from programmes in continuing education, the department has recently completed a survey of the needs of adults in selected areas of rural and urban Rajasthan. These surveys are expected to help the department in drawing up its programmes to fulfil the expressed needs of the adults and the State.

Jodhpur University Adult Education Centre

Under the auspices of the Planning Forum of the Jodhpur University, an Adult Education Centre has been started in the university campus for the benefit of Class IV employees of the university. The Centre also proposes to start classes for illiterate adults residing in the vicinity of the campus.

41st Annual Meeting of the Inter-University Board

The 41st Annual Meeting of the Inter-University Board of India & Ceylon is scheduled to be held at the University of Mysore, Mysore, on 5th & 6th February, 1966. As usual, Vice-Chancellors of the Member Universities in India & Ceylon, representatives of the Union Ministries, UGC, UPSC, British Council, USEFI, Association of South East Asian Institutions of Higher Learning, Trihuwan University, Nepal etc. will attend the meeting.

I.A.U. Conference in Tokyo

The fourth general conference of the International Association of Universities is scheduled to be held at the University of Tokyo from 31st August to 6th September, 1965. On behalf of India Dr. C.P. Ramaswami Aiyar, Vice-Chancellor, Annamalai University and President of the Inter-University Board and Dr. A.C. Joshi are likely to attend the Conference. The themes that will come up for discussion at this Conference are: (a) Access to Higher Education; (b) The Contribution of Higher Education to Economic and Cultural Development; (c) University Autonomy, its Meaning Today.

Dr. A.C. Joshi has been invited to preside over one of the plenary sessions and also participate in the deliberations of a working party dealing with the contribution of higher education to economic and cultural development.

Grants Through U.G.C.

The Government of India is understood to have decided in principle that grants to institutions deemed to be universities under section 3 of the UGC Act should be given by UGC. Hitherto grants for such institutions were given by the Ministry of Education or other concerned departments of the Central Government.

Jammu & Kashmir University reorganised

The Jammu & Kashmir University has been reorganised into a federal institution with two autonomous units known as divisions of equal status, for Jammu and Kashmir provinces. As a result of the reorganisation, the university will have a Senate, Central Council and Joint Academic Board. Each of the divisions will have a Syndicate, Faculties, Boards of Studies and Board of Inspection. There will be a Pro-Vice-Chancellor for each of Divisions, with a Vice-Chancellor for the University.

Medium of Instruction

Thirty-three universities have adopted Hindi as medium of instruction/examination in addition to English.

The universities are: Agra, Allahabad, Aligarh, Banaras, Bhagalpur, Delhi, Gorakhpur, Gujarat, Indira Kala Sangeet, Jabalpur, Jodhpur, Kurukshetra, Lucknow, M.S. University of Baroda, Magadh, Nagpur, Osmania, Panjab, Patna, Rajasthan, Ranchi, Sardar Vallabhbhai Vidyapeeth, Saugar, S.N.D.T. Women's, Udaipur, Bihar, Vikram, Jiwaji, Ravi Shankar, Gurajad Vidyapeeth, Gurukul Kangri, Kashi Vidyapeeth and K.S. Darbhanga Sanskrit Vishwavidyalaya.

The question of making Hindi as a medium of instruction/examination is also under consideration of Indore University and U.P. Agricultural University.

The medium of instruction at Varanaseya Sanskrit Vishwavidyalaya is Sanskrit, but for modern subjects, Hindi is also used.

The medium of instruction at Jamia Millia Islamia is Urdu, but in special cases instruction is imparted in Hindi also.

Teachers as authors

To encourage university teachers to write textbooks instead of cheap help books, the Academic Council of Panjab Agricultural University has decided to provide them stenographic and typing help, travel facilities for visiting libraries and other sources of information, facilities for photographic and art work, and the facility of getting the books printed at the university press.

Teachers engaged in writing textbooks will also be given time off from teaching duties.

Recognition of degrees

The University of Mysore has decided that the Master's degree of all statutory universities be recognised as equivalent to the corresponding degree of the university on a reciprocal basis. This would facilitate the registration of candidates for the Ph. D. degree.

University Employment Etc. Bureau

University Employment, Information and Guidance Bureau have been started recently in the universities of Annamalai, Marathwada, Poona, Kurukhetra and Panjab.

Student Counselling Centre

Annamalai University has started a Student Counselling Centre which is functioning as three wings in the Departments of Philosophy, Psychology and Education.

Personal Library Grant Scheme

Poona University has introduced a scheme for giving grants for purchase of books to teachers in the constituent and affiliated colleges. Known as the "Personal Library Grant Scheme", teachers who have five years' standing as Lecturers and are drawing a basic salary of not more than Rs. 600- are eligible for grant under this scheme.

B.Sc (Agri) Course for V.L.Ws.

Punjab Agricultural University has decided to admit Village Level Workers to the B.Sc. (Agri) course.

The decision has been taken on the recommendation of the Indian Council of Agricultural Education which includes as members Vice-Chancellors of all universities offering agricultural courses and Principals of all agricultural and veterinary colleges.

V.L.W's will be exempted from certain courses in view of their experience in the field, so that the period of instruction for them in the college will be reduced from four to three years.

For the present, 100 students are to be admitted—50 each at Ludhiana and Hissar. The State Commissioner for Agricultural Production has been requested to name suitable V.L.W's for admission who should be under 35 years of age and at least second class matriculates.

Birla Institute of Technology & Science

The Birla Institute of Technology and Science, Pilani, which has recently been declared an institute "deemed to be a university" under the UGC Act, has plans to modernise and upgrade all courses of studies with assistance from the Massachusetts Institute of Technology and the Ford Foundation.

The institute offers facilities for undergraduate and post-graduate studies and research in Engineering—Mechanical, Electrical, Civil, Chemical, and Telecommunication—besides instruction in Mathematics, Physics, Chemistry, Zoology, Botany, Pharmacy, Commerce, English, Hindi, History, Politics, and Economics.

The Birla Colleges of Engineering, Arts and Science which were affiliated previously to the University of Rajasthan, have become the faculties of the institute. A strong school of English language is being established with the help of the British Council.

The chairman of BITS is Shri G. D. Birla, and Prof. V. L. Narayanan is its director.

Asian Plan for Education

A working group of consultants and officials of the Regional Centre for Education of UNESCO met in Bangkok from 30th May to 4th July, 1965. A draft Asian Plan for Education upto 1980 has been drawn up which would be the basic paper for the consideration of the Education and Economic Affairs Ministers of 16 countries in Asia including India. Detailed targets from year to year and financial estimates regarding both recurring and non-recurring expenditure on education at all levels were worked out with the aid of a computer.

Dr. C.D. Deshmukh, Vice-Chancellor of Delhi University, attended the working group at Bangkok as a consultant to UNESCO. In this connection, he stayed in Bangkok for a period of five weeks.

INDIAN INSTITUTE OF ADVANCED STUDY

The Indian Institute of Advanced Study is scheduled to be inaugurated at Simla by President Radhakrishnan on October 20.

The Institute will be a Centre for "meeting of minds and commerce of ideas" and for project-oriented researches in humanities and social sciences. More particularly, the fields of study and research in which the Institute would engage itself, at present, would be: comparative religion and philosophy; comparative aesthetics and history of art; comparative philosophy and linguistics; pure mathematics; European studies; and Indian and South-East Asian Studies. Research would be undertaken by professors and fellows in their chosen fields. To begin with professors would be enlisted from universities for certain periods. It would also select a number of fellows for post-doctoral work. Visiting professors from within the country as well as from abroad will be appointed.

Dr. Zakir Husain is the President of the society which is composed of eminent scholars and educationists and the Society will run the Institute. Shri M.C. Chagla, Union Minister for Education is the Chairman of the Governing Body, of the Institute and Dr. Nihar Ranjan Ray is the Director of the Institute.

HANDBOOK OF UNIVERSITIES

The revised and completely reset edition of the 'Universities' Handbook—India & Ceylon—1964" has just been published by the Inter-University Board of India & Ceylon. The book gives comprehensive information about 55 Indian Universities, 2 Universities in Ceylon, 5 Indian Institutes of Technology and 8 Institutions which are recognised as "deemed to be universities" under Section 3 of the UGC Act, 1956. The book runs to over 650 pages set in two columns. Copies of the same can be had from the Secretary, IUBIC, Rouse Avenue, New Delhi. Price per copy is Rs. 25; £ 2;— \$ 6.00 which includes postage, by surface mail to foreign countries.

STUDY OF I.A.S. RESULTS

According to a comparative study of university and I.A.S.

(written part) examination results, made by the UPSC, the performance of Honours graduates at IAS examination is, in general, better than that of Masters, and the pass percentage among B.A.s and B.Sc.s is the lowest.

The study reveals an overall decline in the pass percentage of IAS candidates from 19.4 in 1957 to 9.8 in 1962. But the decline is particularly steep among pass graduates. In their case the pass percentage fell from 14.6 to 3.5 during 1957-62.

While the overall pass percentage among first divisioners has been more or less stationary, the performance of second class and third class graduates has been going down. In 1962, the pass percentage for first divisioners was 27.9; for second divisioners 12.1; and for third divisioners 2.3.

So far as trends regarding the numbers appearing and qualifying at IAS examinations are concerned, it is observed that during 1957-62, the number of candidates appearing as well as qualifying has diminished considerably. In 1957, the number of candidates appearing and qualifying was 5,216 and 1,010 respectively. As against this, the comparative figures for 1962 were 4,446 and 434.

While there has been a fall in the number of pass graduates appearing and qualifying at IAS examinations, in the case of Honours graduates and Masters the percentage is increasing, though gradually.

About 12 to 13 percent of candidates who appeared at the IAS examinations during 1957-62 held a First Class, about 45 percent held a Second Class and 42 percent were third divisioners.

But so far as successful candidates are concerned, about 25 to 30 percent were first divisioners, 55 to 60 percent second divisioners and only 10 to 15 percent were third divisioners.

A perusal of the distribution of successful candidates university-wise shows that a considerable number of them were drawn from

Madras, Delhi, Calcutta, Bombay, Allahabad and Punjab universities. Agra, Andhra and Patna universities also contributed appreciably to the total number of candidates. In the case of Baroda, Jammu & Kashmir, Jabalpur, Saugar, Vikram, Visva-Bharati and Sri Venkateswara Universities, the number of candidates who qualified in the IAS examination during 1957-62 is negligible.

AMERICAN BOOK EXHIBITION

A collection of 7,000 American technical book titles and 325 professional journals will be exhibited in New Delhi in the new YMCA building during the period September 10-29, 1965.

The "U.S. Technical Books" exhibit, which is being presented under the sponsorship of the United States Information Service, will be shown in several major cities of India, after highly successful exhibitions in the Soviet Union and Yugoslavia.

The collection represents a cross-section of current American scholarship in all major fields of engineering, architecture, industrial technology, chemistry, mathematics, biology, physics, zoology, agriculture, medicine, public health, geographic sciences, electrotechnics and electronics.

After its Delhi showing, it is scheduled to open in Bombay in the late autumn.

Socio-Economic Atlas of Punjab

In collaboration with the Census Organisation of the Punjab, Dr. Gurdev Singh Gosal, Head of the Geography department in the Punjab University has completed "A Socio Economic Atlas of the Punjab". Various physical resources, population characteristics and other economic aspects of the Punjab have been depicted in a series of about 300 maps.

Dr. Gosal, in collaboration with the Government Engineering College, Chandigarh, has also drawn up a report on "Terrain Evaluation of the Punjab Plains". This was a project of the Defence Ministry.

CULTURAL EXCHANGE

Under the cultural and scientific exchange programme of the Government of India agreements have been signed in recent months with the Governments of the U.S.S.R., Hungary, Bulgaria and Rumania. These agreements provide, among other things, for the exchange of university professors, teachers, scientific workers and research trainees on a reciprocal basis for varying periods.

By far the biggest agreement concluded is with the USSR. Six Soviet experts will participate in research work in the advanced study centres of Physics, Botany and Chemistry at the Delhi University, Technology Centre at Bombay and Chemistry and Geology & Geophysics Centres at Osmania University.

Scientific contacts between the following Soviet and Indian higher educational establishments will be encouraged. Moscow State University—Delhi University; Leningrad State University—Bombay University and Bangalore Institute of Natural Sciences; Kiev University—Bangalore and Mysore Universities; Tbilisi State University—Madras University; Dushanbe State University—Aligarh University; Tashkent State University—Lucknow University; Ashkhabad State University—Osmania University; Frunze State University—Gujarat University; Moscow Power Institute—Bombay Technological Institute; Yerevan State University—Panjab University; Azerbaijan State University—Jammu & Kashmir University.

Five teachers on different subjects will be sent by USSR for a period of two years to work in the Indian Institute of Technology, Bombay. Similarly, five teachers will be sent from the IIT, Bombay to the Soviet Union for acquainting themselves with the system of higher education in the USSR.

Twenty-one teachers of the Russian language will be sent by the Soviet Union to work in various institutes of higher education. Six to eight teachers in the subjects of

Natural Sciences, Humanities and Social Sciences will be sent by the Soviet Union for delivering lectures and for participating in research activities in the higher educational establishments in India.

About fifty persons including 25 teachers will be sent from India to the Soviet Union to study at the higher educational establishments. The Soviet Union will send upto 15 students, post-graduates and trainees for study of the economy, geography and history of India and for language practice in the Indian Universities.

People's Republic of Bulgaria

The People's Republic of Bulgaria and India will exchange visits of two experts each in education for a period of 30 days for the purpose of exchanging experience in the field of education in the two countries. Between August 1965 and January 1966 two scientists will visit India from Bulgaria for a period of 3 weeks to acquaint themselves with scientific work in Indian Universities. One or two scientists (university professors) will also be sent to Bulgaria for a period of 3 weeks between October 1965 and May 1966 to visit scientific institutes in Bulgaria.

Three postgraduate students will be awarded scholarships on a reciprocal basis by the two countries.

Hungary

Three to four University professors or other experts will be exchanged by Hungary and India to pursue studies or give lectures for a total of 16 months during the period April 1965 to March 1967.

An expert on water power development will be sent to India on a lecture tour for four weeks.

Ten Indian scholarship holders will be received by Hungary as post-graduates in technical subjects for a period of one to three years each. The Indian side in turn will receive four postgraduate research workers!

Fellows to study Hindi or any other subject acceptable to both sides for a period of one year each.

Rumanian People's Republic

The agreement with the Rumanian People's Republic provides among other things for the exchange of a professor. The Rumanian side will send a Professor, specialist in oil, for teaching at the Indian Oil Institutes in New Delhi and Dehradun for a period of ten months. The Indian side will send a Professor of Hindi language and literature for teaching at the Bucharest University for a period of one academic year.

Rumania is also to send 2-3 scientists or professors, for a period of 3 weeks each, for delivering lectures and making contacts. India will send, for a period of 3 weeks each, 2-3 scientists or professors of education for delivering lectures or making contacts in Rumania.

Two post-graduate scholarships are also to be awarded on a reciprocal basis for subjects to be mutually agreed upon.

Chair of Indian Studies in Tashkent

Under the cultural agreement signed with the Government of India recently the Soviet Union will establish a Chair of Indian Studies at the Tashkent State University.

A Chair of Uzbek or Tadjik Studies is also proposed to be established at one of the Indian Universities by the Government of India.

Nehru Professorship

The Gauhati University has instituted the Jawaharlal Nehru Professorship in Assamese with effect from this year. Dr. V.V. Rao, Professor and Head of the Department of Political Science of the university donated Rs. 1,25,000 towards the fund for the Nehru Professorship.

Seminars


Summer Science Institutes - A permanent feature

Dr. D.S. Kothari, Chairman, UGC, presiding over a two-day Evaluation Conference of the Summer Institutes on July 19, 1965 said that the Summer Science Institutes would be made a permanent feature of science education in India. These institutes, he said, played a vital role in the development of science, because they familiarised the participating teachers with the new methods, curriculum and approach to the teaching of science.

In collaboration with the USAID and the NCERT 94 summer institutes in all are being organised this year by the UGC. The importance attached to these institutes is evident from the fact that in 1963 the programme was started with only 4 institutes and in 1964 the number was raised to 44. Next year it is proposed to have 150 institutes and by 1969 300 institutes, thus training about 15,000 teachers every year. In this way nearly 50,000 teachers or 1/3rd of the total teachers of science at school and college levels would have been reorientated in the new techniques and methods of science teaching.

Apart from the summer institutes in Physics, Mathematics, Chemistry and Biology which were organised for the benefit of science teachers both in Colleges and in Secondary schools/Intermediate classes/Training colleges, four institutes for college teachers in English language were also held. Teachers of English language as distinct from English literature have been given some insight into modern and economical ways of teaching the language.

Nearly 200 U.S. consultants and 8 top-ranking British experts with specialised knowledge of modern techniques of teaching English made available by the British Council



Dr. Bool Chand, Vice-Chancellor, Kurukshetra University giving his presidential remarks at the Valedictory Function of the Summer Institute in Mathematics for school teachers held from June 7 to July 16, 1965 at Kurukshetra.

assisted the Indian Directors of the Summer Institutes.

Students' Summer Institute

The Punjab University Department of Mathematics organised a Summer Institute at Solan recently for brilliant students of Mathematics from different Indian universities. It was attended by 5 college teachers and 13 students and the courses included the Number Theory, the Set Theory, Group Theory and Topology. The Institute was sponsored by the UGC.

Refresher Course

Sponsored by the UGC, the Punjab University Department of Mathematics organised a Refresher Course in Mathematics for college teachers. 46 teachers from various affiliated colleges of the university attended the course.

Seminar on University Education

A Seminar on 'University Education' was held under the joint auspices of the University of Kerala and the Indian Committee for Cultural

Freedom at the University of Kerala in February 1965. Prof. Samuel Mathai, Vice Chancellor, Kerala University inaugurated the Seminar and Dr. C. D. Deshmukh, Vice-Chancellor, University of Delhi presided over the Seminar. The Seminar which was attended by about 40 delegates from several Indian Universities was spread over two days and 15 working papers were presented and read in seven sessions. Among the various aspects of University Education discussed during the Seminar were : (1) Universities and the contemporary world (2) The problem of inequality of opportunity (3) Medium of Instruction (4) Freedom of Universities in India.

Natural Science Teaching Symposium

A symposium on "Teaching of Natural Science" was recently held at the Panjab University. Nearly 40 teachers from Kurukshetra, Panjab, Roorkee, Delhi and the Panjab University attended the symposium. It was sponsored jointly by the Committee for Cultural Freedom, the UGC and the Panjab University.

Orientation Courses for Teachers

Three Orientation Courses for teachers were recently organised by the Shivaji University to acquaint the teachers with the different activities of the university and the role they have to play in the field of higher education. Some of the topics discussed in the courses were: Laws of learning: the teacher and the student; the teacher and the curriculum.

Orientation Programme for Students

An Orientation Programme was arranged by the Jadavpur University for new entrants to the different courses of the university. The students were welcomed by the Vice-Chancellor and the Registrar and were shown round the campus by a batch of senior students. The students were supplied with a campus plan, routine information brochure and a calendar and were also introduced to the Heads of different departments and other university officers.

History Teaching Seminar

A three week seminar on "The Study of History and College History Teaching" was held at Patiala under the auspices of Punjabi University and Baring Union Christian College, Patiala. Its objective was:

"To improve the standard of college history teaching both by providing selected teachers with some training in the use of modern historical methodology and by encouraging them to relate their new understanding of their subject derived from that experience to the concrete problems involved in teaching degree college students in such a way that specific ways and means of improving the teaching process can be seen, evaluated, and adopted."

18 History teachers from colleges affiliated to Delhi, Kurukshetra, Panjab and Punjabi University attended.

The training in historical methodology was carried on through lectures, discussions, and workshops in which each participant had to both write a paper under the guidance of his leader and prepare a teaching plan on a topic which he normally teaches. This experience was then related to the problems of

history teaching through daily discussions of the problems we face, their effect upon our teaching, and the ways in which they can be remedied. The ideas emerging from these discussions are embodied in the recommendations of the seminar. Some of the main recommendations are given below:

1. The University Grants Commission report on examination reform was endorsed and the U.G.C. was asked to take steps to implement it. Question papers from every university should be examined by the U.G.C. each year to see that the questions are of an appropriate standard and in conformity with the type of questions recommended by the UGC report. Such action on the part of the UGC would help to: (a) standardise the levels of examinations; (b) make the paper-setter and examiner answerable to a body distinct from the university (c) decrease the system of private patronage which seems current in the appointment of examiners.

2. If the aim of the examination system is to test the student, there should be a series of tests spread over the year instead of one examination at the end of the year.

3. Paper setters should give a tentative plan of the mode of evaluation of the question paper when submitting it to the Head of the Department or Board of Moderation. This will be indicative of what he expects.

4. No teacher should have more than 40 students per class and a total of no more than 100 students if his teaching work is to be effective.

5. At the time of admissions students should be forbidden to opt for unrelated subjects (e.g. History, Music & Home Science).

6. Seminars, tutorials, preceptorials are to be encouraged.

7. Certain topics in each syllabus should be taught in a way which illustrates the use of scientific methods of historical inquiry so that the student will have a better understanding of the nature of the subject.

A full report of the seminar will soon be appearing under the title, *The Study of History and College History Teaching*. Those who are interested in having a copy should write to the Registrar, Punjabi University, Patiala.

PART TIME COURSES

Delhi University has instituted (a) five-year part-time degree course in Engineering leading to the B.E. (Tech.) degree; and (b) two-year part-time M.Ed. course.

Indore University is introducing a condensed part-time degree course for diploma holders in the Govindram Seksaria Technological Institute. The duration will be four years or eight semesters.

Two new faculties, viz. Faculty of Education and Faculty of Home Science, will also be set up shortly.

Jadavpur University has instituted Post-graduate (evening) courses in Arts for school teachers in English, Bengali, History, Economics, Sanskrit, Philosophy and Mathematics with an intake of 40 candidates in each course.

Poona University has introduced part-time Engineering courses for the benefit of those who are employed in Industries and Technical Establishments.

Mysore University has resolved to start evening classes in Arts both for PUC and the first year of B.A. degree course in the Maharaja's College, Mysore from September 1965. Permission has also been accorded for the starting of similar evening classes in Commerce in D. Banumiah's College of Commerce and Arts, Mysore.

NEW UNIVERSITIES

The Dibrugarh University with jurisdiction over Sibsagar and Lakhimpur districts of Assam has come into being with effect from 1.7.1965.

A new university, the Madurai University, is to be set up shortly. The Madurai University bill has been drafted and after consideration by the Madras Assembly has been referred to a joint select committee. It is understood that the university will be an affiliating institution with jurisdiction over the districts of Madurai, Ramanathapuram, Tirunelveli and Kanyakumari.

Campus News

Golden Jubilee of Mysore University

In July 1966 the University of Mysore will complete fifty years since its establishment. A Planning Committee for the celebrations in connection with the Golden Jubilee of the university has been set up under the chairmanship of H.H. Shri Jayachamaraja Wadiyar, Governor of Madras. In this connection, the university proposes to collect a sum of Rs. 5 crores through public donations to serve as Reserve Fund for the university.

P.L. 480 Grant to Jadavpur University

A research grant amounting to Rs. 3,68,000 spread over a period of five years has been awarded to Jadavpur University by the National Bureau of Standards (U.S. Department of Commerce) under P.L. 480 programme for a research project in the Division of Physical Chemistry on "Properties of Electrolytes on Non-aqueous Media."

Honours Courses

The University of Mysore has decided to institute three-year honours courses in Arts and Science with effect from the next academic year. These courses will have one Major subject and one or two Minor subjects depending upon the needs of the Major subject. The Honours course will be in addition to the three-year Pass degree course.

Panjab University has introduced Honours School in Mathematics, Bio-Chemistry and Bio-Physics with effect from this year.

Delhi University has instituted the B.A. Honours degree course in Mathematical Statistics.



Dr. Milton Obote, Prime Minister of Uganda, arriving in procession to receive the Honorary degree of Doctor of Laws from the University of Delhi on August 5, 1965. Dr. C.D. Deshmukh, Vice-Chancellor, Dr. Zakir Husain, Chancellor and Shri Lal Bahadur Shastri, Prime Minister of India are also seen in the picture.

New Courses of Study

Burdwan University has started Diploma Course in Library Science.

Delhi University has recently instituted the following new courses :

- (1) Two-year Certificate course in Chinese ;
- (2) Certificate course in Office Supervision for Women ;
- (3) Two-year diploma course in Swahili ;
- (4) Diploma course in Spanish ;
- (5) One-year certificate course in Sanskrit for non-Sanskrit knowing students ;
- (6) Two-year diploma course in Sanskrit for non-Sanskrit knowing students.

I.I.T., Bombay has introduced a two-year postgraduate diploma course on Docks and Harbour Engineering. Sponsored jointly by the Ministry of Transport and the Institute in cooperation with the Port Trust authorities in Bombay and Calcutta, the course is mainly intended for candidates sponsored by the Port Trust.

A postgraduate diploma course of one year's duration in Cellulose Technology and a one-year postgraduate diploma course on Furnace Design have also been instituted.

I.I.T., Madras has instituted a five-year Aeronautical engineering course leading to the B.Tech degree this year.

To house the Metrology laboratory, a new block at a cost of about 1.13 lakhs has been constructed. The laboratory in the ground floor will be air conditioned and classes will be held on the first floor.

Jabalpur University has introduced M.A. course in Pali & Prakrit with effect from this year.

Jadavpur University has instituted a five-year degree course in Architecture leading to the degree

of Bachelor of Architecture with an intake of 30 students.

Jamia Millia : With effect from this session, a B.Sc. Course has been started.

Jodhpur University has introduced Semester Plan in the faculty of Engineering. An academic year is divided into two Semesters except for the final year.

The University Syndicate has decided to accept in principle the institution of a separate Master's degree course in Business Administration.

Kerala University has started two part-time three-year post-graduate courses in Business Management and Industrial Management at the School of Management Studies, one of the new Departments of the University Centre at Ernakulam.

Mysore University has instituted a post-graduate course in Food Technology leading to the Master's degree. Instruction will be imparted in the Central Food Technological and Research Institute, Mysore.

Osmania University has decided to hold a University Examination at the end of each year of study covering the courses studied in that year in the three-year degree courses beginning with the batch admitted in July 1964.

The University has started the following new courses this year : (1) one-year diploma course in Public Administration; (2) one-year post-graduate degree course in Library Science in place of the old Diploma Course; (3) one-year diploma course in Co-operation; (4) one-year diploma course for trained teachers; (5) a postgraduate diploma course in Linguistics.

Telugu Journalism has been introduced by the university as an optional subject in the Bachelor of Journalism degree course.

Panjab University proposes to start classes in Business Management shortly. These will be held in the Department of Commerce and Business Administration.

Poona University has instituted a Certificate Course in Russian.

A degree course in Instrumentation leading to the degree of B.E. (Instrumentation) has also been introduced.

Rajasthan University has started a post-M.A. diploma course in International Relations.

A diploma course in Indian Culture for those who have passed the Intermediate or an equivalent examination has also been introduced.

S.V. Vidyapeeth has introduced courses leading to the following degrees : LL.B.; B.V.Sc. & A.H.; B.Ed. (English); M.Sc. in Agri. Botany; M.Sc. in Biochemistry.

Shivaji University has instituted a Bachelor of Pharmacy degree course.

A postgraduate diploma course in Library Science has also been instituted.

The university has raised the duration of the engineering degree course from 3 years to 4 years.

NEW COLLEGES

Burdwan University has granted affiliation to three new undergraduate colleges from the academic session 1965-66 and one Teachers' Training College for women. The total number of colleges affiliated to the university is 43.

Delhi University has recently granted affiliation to 6 new colleges,

two of which are for women.

Indore University has granted recently affiliation to three private colleges.

In pursuance of the general policy of the State Government, the Jabalpur University is actively considering the question of taking over of the two Government colleges situated in the vicinity of the campus, viz., the Mahakoshal Arts Mahavidyalaya and the Government Science College.

Mysore University : Seven new colleges have been started during the current academic year in the university area including a college for women.

Rajasthan University has granted affiliation to the Kanodia College for Women which has recently been opened at Jaipur. The college is administered by a private trust.

S.V. Vidyapeeth has granted affiliation to three colleges and to the H.M. Patel Institute of English.

Shivaji University has granted affiliation to nine new colleges during 1965-66.

Sri Venkateswara University has granted temporary affiliation for the academic year 1965-66 to three colleges in the Nellore district for the teaching of P.U.C. and one college in the Anantapur district for the teaching of P.U.C. B.A. and B.Com.



Students talking to each other.

ALL-INDIA ENROLMENT, FACULTYWISE, AT UNIVERSITY LEVEL*
1963-64 AND 1964-65

Faculty	Total		P.U.C.		Pre-prof.		Inter		Graduate		Post-graduate		Research		Dip./Cert.		
	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65	
Arts Including Oriental Learning ...	5,79,049	6,41,186	1,32,902	1,44,429	—	—	1,06,093	1,09,199	2,85,553	3,28,607	43,908	47,211	2,862	3,428	7,731	8,312	
	...	4,35,925	4,78,702	1,37,073	1,45,742	—	—	84,258	89,060	1,95,297	2,22,416	17,000	18,392	2,251	2,850	46	242
Commerce	...	1,30,578	1,47,789	25,266	29,096	—	—	18,837	20,467	78,283	89,061	7,027	7,906	229	236	936	1,023
Education	...	26,727	29,528	—	—	—	—	—	—	22,380	24,962	1,561	1,717	135	116	2,851	2,733
Engg./Tech.	...	71,015	78,114	—	—	5,566	5,786	—	—	61,677	66,099	1,386	1,540	178	179	4,208	4,510
Medicine	...	54,708	61,742	—	—	6,000	5,628	45	—	44,455	49,847	2,267	3,101	68	75	1,873	3,091
Agriculture	...	41,116	44,228	130	1,272	2,192	1,454	18,225	19,599	18,199	18,831	2,204	2,900	60	129	106	43
Vet. Sc.	...	5,624	5,711	—	—	281	121	—	—	4,928	5,070	274	346	22	26	119	148
Law	...	29,571	32,000	—	—	—	—	—	—	28,088	30,302	1,214	983	64	53	205	662
Others	...	8,384	9,227	53	27	—	—	5,666	6,070	747	609	44	105	26	1,200	1,848	2,404
Total	...	13,84,697	15,28,227	2,95,424	3,20,566	14,039	12,989	2,33,124	2,44,595	7,37,607	8,35,804	76,685	84,201	5,895	7,104	19,923	23,168

*Including enrolment in Intermediate colleges.

***UNIVERSITY ENROLMENT IN INDIA—STATEWISE & FACULTYWISE**

1964—1965

State	Arts	Science	Commerce	Education	Engg./Tech.	Medicine	Agriculture	Vet. Sc.	Law	Others	Total
	%	%	%	%	%	%	%	%	%	%	
Andhra	18,181 23.1	37,003 47.1	5,526 7.0	1,487 1.9	6,169 7.8	6,915 8.8	1,181 1.5	626 0.8	1,291 1.6	312 0.4	78,691
Assam	32,667 67.9	9,464 19.6	2,367 4.9	391 0.8	967 2.0	1,117 2.4	391 0.8	246 0.5	527 1.1	—	48,197
Bihar	61,233 53.8	31,670 27.8	5,774 5.1	1,042 0.9	6,632 5.8	2,941 2.6	1,089 0.9	650 0.6	2,846 2.5	6	1,13,903
Gujarat	30,966 37.0	24,289 29.0	12,329 14.7	1,148 1.4	6,019 7.2	3,686 4.4	1,241 1.5	100 0.1	3,319 3.9	690 0.8	83,787
Punjab & Kashmir	5,176 39.7	5,237 40.2	235 1.8	420 3.2	971 7.5	650 5.0	314 2.6	—	—	—	13,023
Kerala	28,632 34.3	40,978 49.1	1,590 4.3	2,450 2.9	4,008 4.8	2,734 3.3	284 0.4	252 0.3	524 0.6	—	83,452
Madhya Pradesh	36,696 41.1	23,225 26.0	10,833 12.1	2,326 2.6	6,062 6.8	4,202 4.7	1,856 2.1	492 0.6	3,152 3.5	420 0.5	89,364
Madras	23,002 26.1	41,673 47.2	5,697 6.4	1,828 2.1	6,580 7.5	6,013 6.8	988 1.1	705 0.8	1,161 1.3	631 0.7	88,278
Maharashtra	59,363 35.7	51,682 31.1	29,519 17.7	3,725 2.2	5,781 3.5	6,844 4.1	3,909 2.4	361 0.2	5,080 3.0	100 0.1	1,66,334
Mysore	16,703 23.3	29,855 41.7	6,038 8.5	1,371 1.9	8,340 11.6	6,040 8.4	967 1.3	437 0.6	1,905 2.7	—	71,676
Orissa	11,826 43.5	8,625 31.7	786 2.9	611 2.2	1,856 6.8	1,841 6.8	970 3.6	259 1.0	428 1.5	—	27,202
Punjab	39,900 50.0	17,749 22.2	1,581 2.0	4,089 5.1	7,884 9.9	4,832 6.1	2,023 2.5	386 0.5	983 1.2	423 0.5	79,830
Rajasthan	16,614 40.9	9,898 24.4	6,656 16.5	1,425 3.5	1,434 3.5	1,911 4.7	1,372 3.4	180 0.4	1,101 2.7	—	40,591
Uttar Pradesh	1,51,335 45.3	1,01,219 30.3	24,332 7.3	4,710 1.4	7,560 2.3	5,596 1.7	27,029 8.1	864 0.3	5,230 1.5	6,247 1.8	3,34,122
West Bengal	88,399 49.2	42,906 23.9	30,017 16.8	2,284 1.3	6,843 3.8	4,199 2.3	594 0.3	153 0.1	3,778 2.1	363 0.2	1,79,446
Delhi	20,583 67.6	3,229 10.6	2,489 8.2	241 0.8	1,008 3.3	2,161 7.1	—	—	705 2.3	35 0.1	30,431
Total	6,41,186 42.0	4,78,702 31.3	1,47,789 9.7	29,228 1.9	78,114 5.1	61,742 4.0	44,228 2.9	5,711 0.4	32,000 2.1	9,227 0.6	13,28,227

*Including enrolment in Intermediate Boards.

Based on a statistical report prepared by UGC

ENGLISH IN INDIAN UNIVERSITIES

Fifth in the series of Review Committee Reports of the UGC, the Report of the English Review Committee emphasises the need for strengthening the teaching of the English language in the universities and colleges.

The Committee has noted that the change in the medium of instruction in the schools has created a number of problems which affect standards—both of learning, and teaching—in colleges and universities and has also observed that the problem has been further accentuated by factors like the rapid expansion of education, paucity of teachers, etc. Consequently, it points out that "today the large masses of students who come to the university are so ill-equipped in their knowledge of English that they find it difficult to read, and much more difficult to express themselves, in that language." Therefore, the committee observes that the "urgent, pressing and over-riding problem is to teach the students enough to enable them to read simple books on the one hand and to express themselves in *correct* English on the other." This, however, is the responsibility of the schools but for a variety of reasons they are unable to discharge this responsibility. Until such time as the schools are able to fulfil this obligation the universities will have to take upon themselves the task of remedying the defects in the English of the students who enter the university.

The Committee points out two aspects of the programme of English teaching, viz., teaching the language as a medium of communication and teaching English literature. Though there are no inherent conflicts between the two aspects, the Committee observes that greater attention should be paid to the language aspect.

Recommendations

In universities where English is not the medium of instruction the aim should be to develop the reading comprehension and in universities

which have English as the medium of instruction the aim should be to develop also the skills of writing and speaking. Again, it would be necessary to teach English as a compulsory subject upto the final year of the degree course in both types of universities.

The Committee has recommended that at the school stage students must learn English for at least 6 years and a select vocabulary of 2500 to 3000 words. To improve the knowledge of English of students who enter the university with inadequate knowledge of English, the Committee recommends, that special courses of 3 to 4 weeks duration be organised or special classes in English during the first term be organised by cutting down laboratory work for science students and tutorials for arts students. Alternatively, English classes could be held outside the normal working hours.

The Committee further recommends that the teaching of English at the pre-university stage be strengthened so that the vocabulary expands, the student has control over structures and improves his reading comprehension. For this purpose there should be at least eight periods per week for English. Tutorial work should in no case be left to the care of junior teachers only.

To make the teachers more competent, the Committee recommends that all teachers should preferably receive some training at the Central Institute of English, Hyderabad and, where this is not possible, at least attend special summer courses organised by the universities.

At the Intermediate and degree stage the Committee recommends that there should be two courses in English. The first course should consist of two or three texts including short stories, essays, short plays, prose and verse, with perhaps a novel. The second course should be concerned with the enlargement

of the student's vocabulary and his command of structures.

Higher Courses

The Committee has also suggested various measures for improving the standards at degree, post graduate and research levels.

The optional papers for the B.A. (Pass) course should have a broad cultural value. The optional and honours courses at the B.A. level and the M.A. course in English ought to form one integrated programme. To raise the standards of postgraduate studies in English, admissions to the course have to be more selective. Preferably an entrance test in composition and comprehension may be held for those seeking admission to the M.A. The Committee also feels, that it is not desirable to divide the M.A. examination into parts and the practice of offering 'dissertation' in lieu of one or two optional papers should be discouraged.

The Committee was constituted in February 1960 with Prof. G.C. Bannerjee, Head of the Department of English, Bombay University as its Chairman and Dr. P.J. Philip, Development Officer (now Joint Secretary), UGC, as its member-secretary. The other members of the Committee were: Prof. K.R. Srinivasa Iyengar (Andhra University); Prof. V.K. Gokak, Director, Central Institute of English, Hyderabad; Prof. C. D. Narasimhaiah (Mysore University); Shri S. Mathni, Secretary (now Vice-Chancellor, Kerala University), UGC; Prof. A.G. Stock (Rajasthan University).

World concern over status of teachers

A report published jointly by the International Labour Organisation and the United Nations Educational, Scientific and Cultural Organisation points out that an improvement of the professional, social and economic status of the teaching profession is essential if the world

Continued on page 18

Awards & Scholarships

Contd. from page 1

Scholarship Facilities

Twenty-five countries have so far offered scholarships or fellowships to Indian students while India has offered facilities for study to nationals of 34 countries.

Besides Indian nationals benefiting under the programmes of the U.N. agencies, Indian scholars and teachers are selected by 11 countries under the Commonwealth Scholarship scheme.

Some scholarships are also offered by the WHO and the ILO which are administered by the Union Ministries of Health and Labour & Employment respectively. Under the Technical Cooperation Scheme of the Colombo Plan also some Indian candidates are sent to various countries for receiving advanced training in medicine and public health and allied subjects.

Post-graduate studies' scholarships

The UGC has allocated 100 scholarships of the value of Rs. 120 p.m. to the universities with Centres of Advanced Study with effect from this year. The scholarships are to be awarded to outstanding graduates who join post-graduate studies leading to a Master's degree in Science, Humanities or Social Sciences.

The awardees will also receive a sum of Rs. 300 p.a. for books and incidental expenses and travel grant once a year from the place of residence to the Centre of Study.

The scholarships are to be awarded to students coming from universities other than the university at which the Centres are located. Applications for the scholarships from suitable candidates will be invited by the Centres.

GOI Overseas Scholarships

Fourteen candidates have been selected for the award under the Government of India scheme of scholarships to Scheduled Castes, Scheduled Tribes, Denotified, Nomadic and Semi-Nomadic Tribes and other economically Backward Classes for overseas studies for the year 1964-65.

UGC Awards

One hundred and eighty-eight candidates have been selected by the UGC for the award of senior and junior research fellowships during the year 1965-66. Of these, 112 have been selected for science subjects and 76 for humanities, and social sciences. The selected candidates for science include 24 for the senior research fellowships and 88 for the junior research fellowships. The corresponding numbers in regard to humanities and social sciences are 19 and 57 respectively.

Utilisation of Services of Retired Teachers

The UGC has selected 21 retired teachers for utilisation of their services during 1965-66. Each of the selected teachers will be paid an honorarium of Rs. 6,000 per annum and annual contingent grant of Rs. 1,000.

Humboldt Awards for 1966-67

The Alexander von Humboldt Foundation is offering fellowships for advanced academic research at universities and institutes in the Federal Republic of Germany during the academic year 1966-67.

Highly qualified and well recommended scholars aged between 25 and 35 and holding a degree equivalent to the German doctorate with at least two years' teaching or research experience at university level are eligible to apply. Fellowship-holders will be paid approximately Rs. 960 a month for ten months and passage to and from in exceptional cases. University fees are paid by the Foundation.

Application forms which can be had from the nearest Consulate-General's office of the Federal Republic of Germany and for candidates residing in Delhi, Punjab, Himachal Pradesh and Kashmir from the German Academic Exchange Service in New Delhi, must reach them duly completed, by September 15, 1965.

that at least 1.5 lakhs would be provided education through correspondence courses in arts, science, and commerce courses both at the undergraduate and postgraduate levels. The intention is that these courses will be taken up in four or five regions of the country by the universities. Personal contact, an important part of the programme, will be organised at the regional levels and at the local educational institutions in the neighbourhood instead of being centralised at the headquarters of the university which runs the correspondence courses. Arrangements would also be made for sending books to students wherever they are, by starting a network of libraries of university status all over the country, at least one in each of a group of 5 to 6 districts. As a matter of fact, the Fourth Plan has made necessary provision for correspondence courses under the programmes of educational development.

Science Talent Scholarships

Three hundred and twenty-five candidates, including 94 girls, have been selected for the award of scholarship on the basis of the result of the Science Talent Search Examination held this year by the Department of Science Education of the National Council of Educational Research and Training. In addition, 190 candidates have been selected for Certificates of Merit.

This year 6,395 candidates appeared for the examination out of whom 1,152 qualified for interview.

Bharatiya Hindi Parishad meets at Kurukshetra

The 21st Annual Session of the Bharatiya Hindi Parishad was held at the Kurukshetra University on April 30 and May 1, 1965. Nearly 300 delegates from all over the country attended the session. Two seminars were also held on the occasion.

Honours courses in Computer Science

Four-year Honours degree courses in Computer Science open to overseas students are to begin in September in the Wolverhampton and Staffordshire College of Technology in the English Midlands and at Brighton College of Technology in Southern England. The new course will be divided into three sections—data processing, scientific problems and technical design.

Student Mountaineering Expedition from Cambridge

A student expedition from the Cambridge University will undertake a mountaineering reconnaissance of the Padar region of Kashmir in the next two months. The expedition consisting of six persons proposes to explore the valleys of the Prul and Brammah glaciers from the direction of Kishtwar—so far never attempted by climbers. Attempts will be made to climb the 20,000 ft. high Brammah and an unnamed peak of over 21,000 ft. The expedition has received formal approval of the Government of India and the Cambridge (University) Expedition Committee. It has also received a grant from the Mount Everest Expedition.

COMEX to India

Two hundred and ten students—one-fifth from Commonwealth countries who have been studying in Britain—left London on July 30, 1965, in five coaches on an 8,000 mile expedition, called COMEX, to Simla, India.

The buses—which have cost £. 27,000 and were handed over by the Indian High Commissioner, Dr. J. Mehta—are a self-contained community with their own theatre, film and sound unit, medical dispensary, canteen, laundry, bank and post office. They will also be used to sleep in.

Journeying through Germany, Austria, Hungary, Yugoslavia, Greece, Turkey, Syria, Jordan, Persia, Afghanistan and Pakistan, the expedition is expected to arrive in New Delhi on August 30, 1965. From here each bus will visit one

of India's University centres—Bombay, Madras, Calcutta, Lucknow and Hyderabad. The students will travel to Simla, for a week-long gathering there on September 12 and are expected to arrive back in England at the beginning of October.

The expedition was suggested by the late Indian Prime Minister, Pandit Nehru, who hoped it would strengthen the ties of friendship between the young people of the Commonwealth. COMEX has the patronage of the Duke of Edinburgh.

B.A.A.S. Meeting in September

The 127th annual meeting of the British Association for the Advancement of Science will be held in Cambridge, UK from September 1 to 8, 1965. Scientists from 14 countries, including India, will be among 3,500 delegates who are expected to attend the meeting. The Indian delegates will be Dr. B.N. Prasad, President of the Indian Science Congress and Shri M.G. Raja Ram, Joint Secretary in the Union Ministry of Education.

Sir Cyril Hinshelwood, President of the British Association, will address the meeting on the opening day. "Science and Scientists" will be the subject for his inaugural address. The meeting will include a full-day symposium on "World Fuel and Power Resources and Needs." In connection with the Symposium an exhibition called "Pattern for Power" will also be held.

International Youth Centre

An International Youth Centre has been set up in The Hague, Netherlands to cater to teenagers of the international community living there who have few opportunities to meet Dutch teenagers and to join them in social, recreational, sporting or goodwill activities. A foundation committee to get the Centre going is manned two-thirds by teenagers and when opened, the Centre will be run almost entirely by the young people with a minimum of adult guidance or help unless especially requested.

Indian Students Abroad

In West Germany

According to the figures published by the German Student Travel Service in March 1963, there were 1,155 Indian students enrolled at West German universities.

Of these, 577 were studying engineering, 177 pure sciences, 175 medicine, 92 arts and social sciences, 22 industrial management, 16 agriculture and forestry, and the remaining 96 students were studying various other subjects.

In U.S.A.

In 1964 Indian students at American Universities and colleges constituted the second largest foreign student community in that country, with a total strength of 6,387—5,722 men and 665 women. Included among these were 1,632 graduate and 4,357 post graduate Indian students.

The subject-wise break-up of the figures are: Arts and Social science 1,026; Education 207; Sciences 1,475; Medicine including nursing and pharmacy 303; Engineering including architecture 2,613; Agriculture 219; Business administration 367.

Full or partial financial support is being received from the U.S. Government by 431, from colleges and universities by 2,056 and from Government of India by 126.

In U.S.S.R.

Two hundred and twenty-seven Indian nationals studied in the Soviet Union in 1964 including 92 students, 98 aspirants and 37 trainees.

Ramsay Fellowship

Dr. Hari Singh Kashiv, a lecturer of Meerut College, who is now in UK has been awarded honorary Ramsay fellowship by the Ramsay Memorial Fellowship Trust of Britain. He is the second Indian to receive this, one of the top British honours.

UNIVERSITIES AND INTERNATIONAL UNDERSTANDING

C.P. Ramaswamy Aiyar

Beginning with this issue, a new feature will be introduced in the magazine. Articles on some aspect of higher Education, Universities, and other related fields which have been published elsewhere will be reproduced. The editor hopes that this feature will prove both invaluable and popular.

In an essay published on the occasion of the bicentenary of the Columbia University, Signor Felice Battaglia, the Rector of Bologna, the oldest among European Universities, sought to answer the question thus posed by him: "What are the instruments, the skills or the insights by which man can discover harmony amidst the diversity and conflicts which seem to surround him?"

Dealing with the past history of his own and other medieval Universities including Paris, Oxford and Salamanca, he adverts to the spirit of synthesis and reason, a universal and historical knowledge that sustained those Universities which were termed *Studium Generale* or the *Universitas Studii*. The spirit underlying those Universities which led to the subsequent epoch-making developments in all parts of the Western world is applicable not only to students and professors but to the subjects studied; and in Battaglia's own words, it involves the conception of a totality, by which he means that the Universities, for instance, of Paris or Bologna were neither Parisian or French nor Bolognese or Italian so much as European. They thus permitted a free exchange of ideas as well as of masters and scholars from the whole of Europe listening to them, as he adds, not only in Western Europe but even Bohemia, Poland and Russia which did not keep apart, as they do today, but collaborated in the great spiritual symposium. It was thus that Western philosophy renewed itself. It was more a hand-maid of theology but was granted the broadest possible autonomy. In other words, the synthesis produced by the European Universities in the Middle Ages juxtaposed with the Christian concept of truth, the Greek and Roman concepts derived

from Cicero and the Stoics. Differing in their organisations, the Institutions of Bologna, Paris, Oxford and Salamanca spoke to the world without any local bias. Each of them was authorised to issue a *Licentia Unique Docendi*, namely, a licence to impart the teaching which was universally recognised. The Universities were universal not only in spatial jurisdiction but they drew their sources from Greece and Rome, classicism and Christianity.

Ideal University

Thus, therefore, notwithstanding that there were so many different States, Cities, Principalities, Republics and Kingdoms, all independent of each other, jurisprudence, the humanities and the sciences were viewed as a panorama of learning. Unfortunately, even in Europe, what has been described as a high sense of mediation animating Universities which regarded themselves as instruments of universal culture, has given place to new narrownesses and parochialism. But as a part of the new and compelling sense of unity that is rapidly developing in the world, as an inevitable result and reaction from the new scientific and technological potentialities and as a result of the one-world doctrine that is gaining ground, people are harking back to the idea of Universities that are and should be, in the language of Cardinal Newman, places of concourse whither the students come from every quarter for every kind of knowledge. To it, in his eloquent words, "a thousand schools make contributions and the intellect safely ranges and speculates, sure to find its equal in some antagonistic activity and its judge in the tribunal of truth."

If such ideals are to be realised, it is essential that political and

doctrinal differences that have compartmentalised the world and have resulted in power blocs and competitive armaments should yield place to complete freedom, not only of discussion among scholars but freedom of travel and intercourse between professors and students all over the world. In the Universities of ancient India, students gathered from all parts of the country to sit at the feet of ancient teachers of wisdom like Vasistha, Visvamitra, Gantama, Yajnavalkya and King Janaka. Similarly, European scholars like Abelard of Paris, Irnerio of Bologna, William Occam and Frigena, drew their students from all quarters of Europe and such teachers and their students formed the nuclei of the University.

Even upto the 19th century in Europe, the spectacle of a student completing his instruction by recourse to celebrated teachers wherever they were to be found and the consequent migration of students from one centre of learning to another was a regular feature. At a recent Commonwealth Universities Conference held at Cambridge and Durham, it was my privilege to move a resolution pleading for a free and unfettered exchange of students between the Universities at least of the Commonwealth. That resolution was adopted unanimously.

International Understanding

It is difficult to conceive of any institution or organisation which is more capable of fostering international understanding than a University. Political Conferences and even gatherings like those fostered by the U.N.O. and the UNESCO, too often, lead to the formulation of set opinions and of various types of premeditated propaganda. A University should

(Contd. on page 18)

Sports

IUSB's DEBUT IN NATIONAL TOURNAMENTS

The Inter-University Sports Board is entering a Combined Universities Hockey Team in the Nehru Memorial Tournament which is scheduled to be held from the 20th November, 1965 at New Delhi.

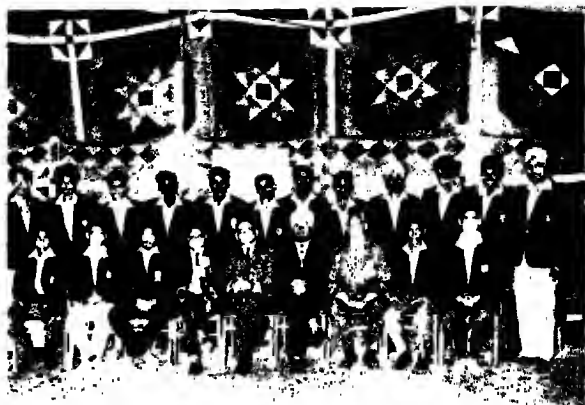
A Combined Universities Athletic Team is also participating in the Zonal and Inter-Zonal Athletics scheduled to be organised in December by the A.A.F.I.

This is the first time when Combined Universities Teams are participating in national tournaments.

Standing Advisory Committee

The Standing Advisory Committee constituted to suggest ways and means of promoting sports in the universities is likely to hold its first meeting in Delhi in the second week of September.

The members of the Committee are : Dr. C.P. Ramaswami Aiyar, Vice-Chancellor, Annamalai University, Dr. B. D. Laroia, Vice-Chancellor, Bangalore University, Dr. Amrik Singh, Secretary, Inter-University Board and Shri S.C. Nanda



Group Photograph of the Combined Universities Hockey Team taken at the occasion of their fixture against the Indian Olympic Team. The score was 2-1 in favour of the Olympic Team.

and Shri V.G. Abraham, Sports Officers of the Delhi and Kerala Universities respectively.

All India Council of Sports reconstituted.

The All India Council of Sports has been reconstituted with effect from 16th July, 1965. General K.M. Cariappa has taken over the Presidency of the Council from the

Maharaja of Patiala who is likely to go to Rome as our Ambassador. Lt. Col. Maharajkumar Dr. Vijaya Ananda of Vijayanagram is the Vice-President of Council. Besides the President and the Vice-President, 16 members have been nominated who will all hold office for a period of two years. Two persons have also been coopted unanimously by the AICS at its recent meeting.

(Contd. on page 17)

ALLOCATION CHART FOR 1965-66

FOR GAMES TO BE PLAYED ON FOUR-ZONAL BASIS

Tournament	North Zone	South Zone	East Zone	West Zone	All India Finals	Period of the Tournament
Badminton (Men & Women)	U.P. Agrl.	Karnatak	Bihar	Vikram (Men) Bombay (Women)	Karnatak	1st fortnight of October
Basketball (Men)	Panjab	Bangalore	Calcutta	Gujarat	Bangalore	Last week of November
Cricket	Aligarh	Bangalore	Patna	Indore	Patna	23rd December to 15th January.
Football	Lucknow	Sri Venkateswara	Patna	Jabalpur	Lucknow	1st fortnight of October.
Hockey (Men)	Aligarh	Kerala	B.H.U.	Vikram	Vikram	1st fortnight of January.
Table Tennis (Men)	Aligarh	Osmania	Gauhati	Bombay	Bombay	1st fortnight of October.
Tennis (Men)	Allahabad	Mysore	Utkal	Shivaji	Allahabad	5th to 15th January
Volleyball (Men)	Rajasthan	Osmania	Saugar	Jiwaji	Osmania	1st fortnight of November.

PERSONAL

Dr. Triguna Sen, Vice-Chancellor, Jadavpur University, has been awarded "Padma Bhushan" for distinguished service to the cause of education.

Dr. D.S. Reddi, Vice-Chancellor, Osmania University has been nominated as a member of the University Grants Commission vice Dr. A.C. Joshi who has been appointed an Adviser in the Planning Commission.

Shri Raja Roy Singh, Joint Secretary in the Union Ministry of Education, has been appointed as Director of the UNESCO regional headquarters in Bangkok.

Dr. P. Maheshwari, Head of the Department of Botany, Delhi University, has been elected a Fellow of the Royal Society.

Shri Suraj Bhan has succeeded Dr. A.C. Joshi as Vice-Chancellor of Panjab University w.e.f. 1st July, 1965.

Dr. Bool Chand has succeeded Shri Suraj Bhan as Vice-Chancellor of Kurukshetra University w.e.f. 30th June, 1965.

Prof. M.P. Sharma took over as Vice-Chancellor of Saugar University w.e.f. 22nd June, 1965.

Dr. Dharendra Varma took over as Vice-Chancellor of Jabalpur University w.e.f. 16th June, 1965.

Dr. M.N. Goswami took over as Vice-Chancellor of Gauhati University w.e.f. 14th May, 1965.

Dr. Bhriugmath Narayan Singh took over as Vice-Chancellor of Bhagalpur University w.e.f. 28th July, 1965.

Shri Kirpal Singh Narang took over as Vice-Chancellor of Punjab University w.e.f. 30th April, 1965.

Dr. Sri Ranjan took over the Vice-Chancellorship of Agra University w.e.f. 21st April, 1965.

Shri R.K. Nehru took over as Vice-Chancellor of Allahabad University w.e.f. 8th March, 1965.

Shri Raja Bajrang Bahadur Singh Bhadri took over as Vice-Chancellor of U.P. Agricultural University w.e.f. 21st December, 1964.

Dr. B.D. Laroia took over the Vice-Chancellorship of Bangalore University w.e.f. 30th September, 1964.

Prof. Madan Mohan has taken over the Vice-Chancellorship of Gorakhpur University.

Dr. M.S. Rajan took over as Director of the Indian School of International Studies w.e.f. 19th February, 1965

(Contd. from page 10)

Dr. B.D. Laroia Vice-Chancellor of Bangalore University is a member of the AICS as a representative of the Universities.

A.I.R. Sports Advisory Committee

A 4-member committee has recently been constituted to advise the All India Radio in matters connected with the selection and grooming of young and talented commentators. The Committee will also review the commentaries broadcast from time to time and suggest improvements.

Maharajkumar of Vijayanagram heads the Committee which includes **Shri Pearson Surita**, **Shri Vijay Merchant** and **Shri Berry Serhadhi-kari** as members.

* * *

ALLOCATION CHART

FOR GAMES PLAYED ON ALL INDIA BASIS

TOURNAMENT	VENUE	PERIOD OF TOURNAMENT
Athletics (Men & Women)	Annamalai	Last week of December, 1965.
Basketball (Women)	Bangalore	Last week of November, 1965.
Boxing	Jabalpur	8th & 9th January, 1966.
Chess	Madras	1st fortnight of October, 1965
Cycling	Madras	
Gymnastics	B.H.U.	3rd week of December, 1965
Hockey (Women)	Nagpur	1st fortnight of January, 1966.
Kabaddi	Shivaji	Last week of November, 1965.
Kho-Kho (Men & Women)	Bangalore	2nd week of January, 1966.
Rowing	Lucknow	1st fortnight of January, 1966.
Shooting	Aligarh	11th and 12th December, 1965.
Squash-Racket	Roorkee	25th to 31 December, 1965.
Swimming (Men & Women) Diving and Water-Polo	Calcutta	1st week of October, 1965.
Table-Tennis (Women)	Gauhati	1st fortnight of October, 1965.
Tennis (Women)	Allahabad	5th to 15th January, 1966.
Volleyball (Women)	Rajasthan	1st fortnight of November, 1965.
Wrestling	Jabalpur	1st fortnight of November, 1965.
Weight-Lifting & Best Physique	Poona	3rd week of December, 1965.

wide shortage of qualified teachers is to be overcome.

The Report forms part of an introduction to the draft Recommendation concerning the status of teachers which has been submitted to Governments by ILO and UNESCO. These Recommendations are put forward as a proposed international instrument covering the whole range of problems affecting the profession, including educational objectives and policies, rights and responsibilities of teachers, conditions for effective teaching and learning, salaries, social security and the teacher shortage. These will be placed before a meeting of experts scheduled to be held in Geneva in January 1966.

Special attention to the problem of teacher shortage is given in the draft Recommendation, even though it is considered that adoption of the Recommendation would remove its underlying cause.

comprise men and women whose minds are flexible and open to new ideas and who can rise superior to racial, national or other narrowing prejudices. The University is typically a place where different opinions are ventilated and discussions held in a spirit of give and take, of toleration and recognition of other points of view. It may, therefore, be well argued that more valuable perhaps than all other forms of contact, a University affords the best opportunity for reconciliation through friendly discussion of different doctrines and inroads of life, national and international. Every attempt should, therefore, be made the Universities truly universal in to make scope, composition and jurisdiction.

I may conclude by referring to a wonderful passage in a Sanskrit Prose Romance, Bana's *Harsa-carita* where a Buddhist Forest University is described which is visited by a King in the course of his search for his missing sister. The passage,

freely translated, runs as follows: "The king got down from his chariot and approached the site of this abode of learning. He found students and professors belonging to different religions, such as followers of Vishnu and Siva and of Buddha and the Jainas as well as atheists and materialists, from many parts of the country. Some were seated under trees, some perched on rocks and some in thatched cottages. They were vigorously debating, arguing and controverting and ultimately arriving at agreed conclusions and harmonising their ideas."

If, in the language of the great Asoka, "reconciliation is the ultimate good," then the Universities of the world would be the aptest and most natural places for such reconciliation.

Even if the above ambitious programme be, under present world conditions, a counsel of perfection, nevertheless, Universities in our country and elsewhere may surely, by the encouragement of mutual contacts and by setting before themselves the ideals of a strenuous and detached search for truth combined with tolerance and charity, help to bridge the gulfs that separate country from country, race from race and creed from creed.

FORM IV

- | | |
|---|---|
| 1. Place of Publication | New Delhi-1 |
| 2. Periodicity of Publication | Once in 2 months |
| 3. Printer's name
Nationality
Address | Amrik Singh
Indian
Inter-University Board of India & Ceylon
Rouse Avenue, New Delhi-1. |
| 4. Publisher's name
Nationality
Address | Amrik Singh
Indian
Inter-University Board of India & Ceylon
Rouse Avenue, New Delhi-1. |
| 5. Editor's name
Nationality
Address | Amrik Singh
Indian
Inter-University Board of India & Ceylon
Rouse Avenue, New Delhi-1. |
| 6. Names & Addresses of individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital. | Inter-University Board of India & Ceylon. |

I, Amrik Singh, hereby declare that the particulars given above are true to the best of my knowledge and belief.

(Sd) Amrik Singh

Signature of Publisher

September 5, 1965.

(With acknowledgements to
Indo Asian Culture)

GAS PLANTS

STEEL TANKS-LAB FURNITURE

GASHOLDERS & BURNERS

LAB GAS & WATER TAPS

STRUCTURAL WORKS

GAS METERS & BOOSTERS

MANSFIELD

G.P.O. Box No. 124 Gal-1 Phone: 445532 (H)
Post Bag No. 1929, Madras-1 Phone: 71223
Post Bag No. 1929, Delhi-6 Phone: 225204

Cable: GASIFY Calcutta, Madras, Delhi

Handy — Economical — Authoritative

— for STUDENTS as well as TEACHERS

ACADEMIC PAPERBACKS

IN

SCIENCE & MATHEMATICS

LIFE SCIENCES

DIVISION OF LABOUR IN CELLS

by G. H. Bourne, Emory Univ.

1962 — 248 pp. — Illus. — \$ 2.95

ISOTOPES IN BIOLOGY

by G. Wolf, Massachusetts Inst. of Tech.

1964 — 170 pp. — Illus. — \$ 2.45

TIME, CELLS & AGING

by B. L. Strehler, Baltimore City Hosp.

1962 — 251 pp. — Illus. — \$ 2.95

PRIMARY PROCESSES IN PHOTOSYNTHESIS

by M. D. Kamen, Univ. of California

1964 — 182 pp. — Illus. — \$ 2.45

DESIGN & FUNCTION AT THE THRESHOLD OF LIFE : THE VIRUSES

by H. Fraenkel-Conrat, University of California, U.S.A.

1962 — 133 pp. — Illus. — \$ 2.45

PHYSICAL SCIENCES

CRYSTALS : Their role in Nature & in Sc.

by C. Bunn, Royal Inst. of London

1964 — 286 pp. — Illus. — \$ 3.45

POTENTIAL BARRIERS IN SEMICONDUCTORS

by B. R. Gossick, Harper College, U.S.A.

1964 — 160 pp. — \$ 2.45

ELEMENTARY DYNAMICS OF PARTICLES

by H. W. Harkness, Queen's Univ., Ontario

1964 — 219 pp. — \$ 2.95

LECTURES ON THEORETICAL PHYSICS in 6 vols

by A. Sommerfeld, Univ. of Munich

1964 — \$ 3.95 each

MOSSBAUER EFFECT : Principles & Applications

by G. Wertheim, Bell Tele. Lab, U.S.A.

1964 — 116 pp. — Illus. — \$ 2.45

ELEMENTARY PLANE RIGID DYNAMICS

by H.W. Harkness, Queen's Univ., Ontario

1964 — 194 pp. — \$ 2.95

MATHEMATICS

NON-EUCLIDEAN GEOMETRY

by H. Meschkowski, Free Univ., Berlin

1964 — 110 pp. — \$ 2.45

QUADRATIC FORMS & MATRICES

by N. V. Yefimov, Moscow Stat. Univ.

1964 — 150 pp. — \$ 2.45

INTRO. TO p-ADIC NOS. & VALUATION THEORY

by G. Bachman, Polytech. Inst. of Brooklyn

1964 — 180 pp. — \$ 3.45

FINITE PERMUTATION GROUPS

by H. Wielandt, Univ. of Tübingen, Germany

1964 — 80 pp. — \$ 2.45

ELEMENTS OF ABSTRACT HARMONIC ANALYSIS

by G. Bachman, Polytech. Inst. of Brooklyn

1964 — 200 pp. — \$ 3.45

Published by :

M/S. ACADEMIC PRESS INC. NEW YORK & LONDON

Distributed by :

INDIA BOOK HOUSE

BOMBAY-1, CALCUTTA-16, NEW DELHI-1, MADRAS-2, BANGALORE-9, HYDERABAD-29.

Descriptive leaflet on AP paperbacks can be supplied upon request

Eastern Economy Edition

TEXT & REFERENCE
BOOKS

PUBLISHED IN INDIA
FOR THE FIRST TIME!

Research in Education

BY JOHN W. BEST

Introduces the fundamentals of research techniques, emphasizing process more than product. Shows how to select a practicable problem, choose suitable data-gathering instruments, organize and analyze data and present the report in proper style and form. Statistical concepts are presented simply and do not require mathematical sophistication to be understood.

320 pp.

3E list price Rs. 9.00
Original U.S. \$ 6.75

THESE ARE THE BASIC TEXTS THAT TEACHING
STUDENTS NEED BECAUSE:

- ★ They present constantly required information and statistics in up-dated and compact form, written by authorities in the teaching field.
- ★ They are recommended or prescribed by almost all the Universities and colleges of India.
- ★ They cost approximately one-third or even less than the original higher-priced American Editions.

YOUR COPIES ARE AT YOUR LOCAL BOOKSHOP NOW!

Teaching Science in Today's Secondary Schools, 2nd Ed.

BY ALFRED T.
COLLETTE AND
WALTER A. THURBER

This new 2nd Edition has been made necessary because of revolutionary changes that have taken place in secondary science education. The new programmes stress science as an enquiry, they recognize learning as an internal process on part of the learner, and that the teacher's role is to place pupils into situations where they can learn.

672 pp.

3E list price Rs. 9.00
Original U.S. \$ 8.50

Educational Psychology 4th Ed.

EDITED BY CHARLES E.
SKINNER

Written by experts in their various fields, the new 4th Edition presents a systematic and authoritative treatment of child and adolescent development, learning, and adjustment in educational situations. Furnishes a foundation in theoretic principles, and develops a clear understanding of the educative process.

755 pp.

3E list price Rs. 12.60
Original U.S. \$ 7.95

write today for a complete catalogue free to:

PRENTICE-HALL OF INDIA (PRIVATE) LTD.

M-97, Aggarwal Buildings, Connaught Circus, New Delhi-1

To our readers...

This is the last time we are addressing our readers before University News becomes a monthly publication. That will happen in January 1966.

With the beginning of the new year thus, this publication will enter upon a new phase of its career. Amongst other things, it is proposed to introduce the following new features.

(a) Every issue will carry an article of approximately 1,000 words dealing with some aspect of University life. The articles will be mainly informative and will focus attention on future developments and trends of new university development.

(b) There will be a regular book section. For obvious reasons the book reviews will not be very detailed, nevertheless all important publications which have a bearing on universities will be noticed and attention of readers will be drawn to matters of general educational interest.

(c) A comprehensive information service is being developed by the University News for the benefit of its readers. It will be open to our readers to seek information about university studies in India (e.g., recognised institutions, recognised examinations, courses of study, national scholarships) and have their questions answered in the columns of this magazine. In course of time we expect this feature to grow into a really useful service for all those connected with universities in any capacity.

(d) A correspondence column in which we would be happy to publish the views of our readers about issues and problems that have a bearing on our university life.

(e) All universities and institutes of higher learning and research in India are being asked to advertise their jobs, academic as

EXAMINATION REFORM IN MYSORE

The University of Mysore has prepared a detailed report on the annual examinations of 1965 with data collected from tabulators and scrutinisers of examination results.

The report serves as a basis for a study of the percentage of passes in Mysore University as compared with other universities. In addition, it gives an insight into the performance of candidates subject-wise, in regard to various categories of institutions as well as different courses of study.

The analysis deserves special mention as it helps to bring out one of the serious defects in the present-

well as administrative, through the columns of this journal. It is hoped that in about a year's time it will be possible for any one looking for a job to refer to this publication and find an all-India statement of jobs that he can apply for.

Apart from the text of the advertisement as sent to us by universities, the University News will compile a directory of such advertisements so as to facilitate easy and prompt reference of jobs available to intending applicants.

All these features will be in addition to the range and variety of news already available to our readers.

After January 1966, we cannot conceive of any library in India going without a copy of University News. But we go a step further and visualise hundreds of university and college teachers subscribing to this publication. It is mainly with these individual teachers in mind that it has been decided to keep the subscription of University News at a most modest figure. As a matter of fact, to save them the bother of renewing their subscription every year, facilities are being offered of three-yearly and five-yearly subscription orders. Details of these arrangements are to be found elsewhere in this issue.

Amrita Chak

day educational set-up. The report is significant because it also suggests remedial measures which should be the concern of all those entrusted with higher education in the country.

A common striking feature of the university examinations is the enormous number of failures in B.A., B.Sc and B. Com.

In the final B.A. examination only 497 out of 1,353 candidates passed—36.7 per cent. In B. Sc. final examination 713 out of 2,746 were successful—25.9 per cent compared to 74.4 per cent pass in Karnataka University and 73.2 per cent in Agru University.

In final B. Com. 197 candidates were successful out of 604—the per cent being 32.6 against 61.2 of Kerala University and 80.3 of Delhi University.

Amongst the failures, those in arts subjects outnumber those in science. In the pre-university examinations, for instance, only 1016 passed out of a total of 3,314 candidates in arts subjects whereas in science out of 7408, 2607 passed; the percentage of failure being 69.4 and 64.8 respectively. The high rate of failures is more noticeable in Zoology, Botany and English: the percentages being 60.5; 55 and 51.5 respectively.

Remedies Suggested

As for the proposals to remedy this state of affairs, the following have been suggested:

The University calendar provides for 200 working days in the year but so far the actual number of working days has been much less due to late admissions and supplementary examinations. This points to the need for fuller utilisation of the available working hours or alternatively better

Talent Bank in Delhi University

With the country entering the industrial era at an accelerated pace the demand for junior level management trainees is rapidly increasing. Major industrial concerns and business houses are running training courses to fill in positions in their managerial and executive wings. In addition to this, a number of industrial concerns are on the look out for talented young men who have the necessary personality, initiative and know-how geared to their specific needs.

As a step in this direction it is proposed to spot talented students at college level and orientate them for management training schemes during their study. This, it is hoped, would make a success of their vocation.

Delhi University has proposed to select a group of 50 students from all the colleges under the University for inclusion in the talent bureau for managerial and executive positions.

The bureau will provide to the students in the talent bank occupational information, data on management training schemes of important industrial organisations, individual career counselling and lectures by specialists from business and industrial organisation, group discussions and industrial visits.

The orientation programme will start from November 1, 1965 and continue upto January 31, 1966. This programme will familiarise the students with management training schemes and its allied branches.

From February 1 to March 31, 1966 psychological and aptitude tests will be held to classify the students into particular groups such as sales, marketing, secretariat administration etc.

Participants in the course will then be allowed a recess from April 1 to May 31, 1966 to prepare for their University examinations.

From June 1 to September 30 there will be lectures by eminent specialists on management training.

A Screening Committee consisting of specialists with the Head of the Department of Business Management and Industrial Relations as its Chairman will make the selection of students for the talent bank.

Madurai University: Special place for Tamil envisaged

The Madurai University Bill which came up before the Madras Legislative Assembly on July 30 has been referred to a Joint Select Committee on a motion moved by the Chief Minister, Mr Bhaktavatsalam.

The members of the Assembly urged that a special place should be given to Tamil in the proposed University.

Explaining the objects of the bill, the Chief Minister said that in the four districts of the State, Madurai, Tirunelveli, Ramanathapuram and Kanyakumari, there were 45 colleges. Madurai was a great cultural centre and it was appropriate that a University should be set up there. He expected the new Madurai University to come up and make its mark in the academic world.

A suggestion had been made that Thanjavur and Tiruchi also should be included in the new University. When the matter went before the Madras University, it was pointed out that a Post-Graduate Centre had been recently started in Tiruchi and southern districts alone were included in the new University for the present. There was no provision in the bill for adding any more districts.

He, however, assured the House of a special place for Tamil and studies therein. He desired that there should be a special faculty in Agriculture and agricultural science.

He appealed to religious trusts, charitable institutions and temples to institute liberal endowments in the new university for specific studies.

Mr Bhaktavatsalam said that at least three universities of the affiliating type were needed for a state of the size of Madras. Therefore, in addition to the university being set up at Madurai, there should be one more, situated perhaps at Tiruchi.

Varsity for Assam

A university for the hill districts of Assam is to be established at Shillong shortly.

The State Government has agreed to the proposal and it is likely to introduce a relevant Bill in

the Assembly. The Centre is believed to have agreed to help the State in this respect, it is reported.

Preference for Executive Jobs

Sixty per cent arts students of the Allahabad University who obtained first division in the intermediate examination, prefer administrative and executive jobs, while only 30 per cent who secured First Division want to become teachers, according to a report on the career aspiration of the arts students of the university.

The report which has been published by the university Employment Information and Guidance Bureau after a survey for ascertaining the career aspirations of the arts students, said that nearly 40 per cent of the students who had some job experience based their aspiration on their previous experience. It was evident in the case of those who had previously worked as tutors that they eventually wanted to become teachers.

An interesting fact revealed in this respect was that poverty and experience were co-related. In most cases, the students were forced to accept a part time or full-time jobs out of economic necessity.

Conference of Asian Education Ministers

A review of progress made in educational developments in Asia at all levels during the past three years including past modes and present trends and a draft model giving a projected picture of Asian education in 1980, are among the points to be discussed at the second conference of Education Ministers from 18 Asian member states of the UNESCO to be held in Bangkok from November 22 to November 29, 1965.

In addition to ministers of education, ministers responsible for economic planning have been invited to participate in a top level discussion of long-term educational planning in Asia.

The meeting will also be attended by observers from other member states and associate members of the UNESCO, as well as from United Nations, its organisations and agencies and non-Governmental organisations.

INDO-GERMAN ACADEMIC EXCHANGE

Since 1961 more than 300 Indian scholars had been sponsored by the German Academic Exchange Service and most of them had done post-graduate studies in their respective fields. Prof. Emil Lehnartz told University News on October 18, 1965.

Dr. Lehnartz, who is the President of the Academic Exchange Service, was on a short visit to the Capital.

The German Academic Exchange Service is a 40 years old non-governmental organization representing 32 universities in Germany. The Service is widely known to Indian professors and students. The activities of the organisation, which has been functioning in India through its branch office in New Delhi, covers all fields of international academic exchange, granting scholarships to post-graduate students, inviting university professors from abroad, exchanging trainees of technical universities as well as providing foreign universities with lecturers for German language and literature. In addition to the branch in New Delhi the Academic Exchange Service has also opened branches in London, Paris and Cairo.

Dr. Lehnartz said that the selection of candidates with outstanding qualifications has shown excellent results and after completion of their studies a good number have chosen teaching, as a profession at Indian Universities.

More than 90 Indian nationals are at present sponsored by the Academic Exchange Service. Another 50 students will be selected in the current year.

Recently the Academic Exchange Service invited more than 100 Indian professors from various universities to Germany. Twenty-four directors of the National Laboratories of the C.S.I.R. also undertook an information tour of West Germany at its invitation. The delegation was led by Dr. Hussain Zaheer, Director of the C.S.I.R.

In the last few years a number of trainees of technical universities were exchanged between India and West Germany and it is stated that 30 Germans got their practical training in Indian firms.



The Union Education Minister, Mr. M.C. Chagla, with the Comex party members at a reception in New Delhi.

At present the largest number of German lecturers for German language teaching are in India. Of the total of 200 German university lecturers 18 lecturers are employed by Indian universities. They are posted at the Universities of Bangalore, Bombay, Banaras, Calcutta, Delhi, Hyderabad, Jaipur, Madras, Poona, Ranchi and Trivandrum.

Modern Laboratory at Madras

Modern laboratories are being set up at the Madras Institute of Technology, one of the five Indian Institutes of Technology, with aid from West Germany.

So far the Madras Institute has received equipment valued at Rs. 2 crores from the West German Government. A further consignment of scientific apparatus of the same value is to be installed there in due course.

This was disclosed at a news conference in Bombay on October 22 by Dr. H. Heiland, a German professor connected with the Indian Institute of Technology, Madras, and Mr. S. Padmanabhan of the department of Mechanical Engineering at the same institute.

They said that the institute had more than 2,000 students and post-graduates and five departments of engineering—mechanical, electrical, civil, metallurgical and chemical.

Comex Farewell to India

Col Lionel Gregory, Organiser of the Comex expedition, in an exclusive message to 'University News' said: "The new Commonwealth is a post-war creation and belongs to the post-war generation, that is to say ourselves."

Recounting his experience among the students in India, Britain and Pakistan he pointed out that his impression had been they would like to see new life injected into the Commonwealth.

"Furthermore the impression I gathered from the universities of Damascus, Baghdad and Teheran is that the existence of the Commonwealth Club is very much envied by those outside it", he added.

Some of the students who were on a visit to Jodhpur, after hostilities started between India and Pakistan said that they had to remain in trenches consecutively for two nights because of air raids.

The Comex team which is a cross section of British universities in England, Wales and Scotland is composed of students from 13 Commonwealth countries a good number coming from Oxford, Cambridge and London Universities.

Nearly 20 professors and five foremen from West Germany would be attached to it.

LUDHIANA SCIENTIST HONOURED

The outstanding original research work in 'agricultural sciences' earned for Dr Dilbagh Singh Athwal the coveted Shanti Swarup Bhatnagar Memorial award. In the opinion of Council of Scientific and Industrial Research, the award is bestowed for conspicuously important contribution to human knowledge. Dr Athwal's work in the development of hybrid bajra has offered the only large-scale practical method for the production of hybrid seed in this crop and the first commercial hybrid developed by him has now been released for cultivation in this country.

Hybrid bajra, a millet, had hitherto received little attention in research experiments. Dr Athwal was the first to assess the potential value and speedy improvement of this neglected seed.

He found that cytoplasmic male sterility offered the only large-scale practical method for production of hybrid seed in this crop. To speed up development, Dr Athwal raised two crops of bajra every year for these experiments in Ludhiana and a third crop in Coimbatore. His experiments proved that the development of hybrid that would normally take at least 10 years could be completed in four years.

It was also discovered that the male sterile lines of Ludhiana are entirely different from that of the U.S.A. This offers new opportunities for development of hybrid bajra because many bajra lines which failed to restore fertility of U.S. male sterile have found to be capable of restoring fertility of two Ludhiana male steriles.

Dr Athwal stood first in the Punjab University in his B.Sc agriculture in 1948. He took his Ph. D from the University of Sydney where his researches were recognised to have made outstanding contributions to knowledge of wheat breeding in Australia. He was employed as a research officer in the Sydney University for about two years. He returned to India in 1955 and is currently professor of plant breeding in the Punjab Agricultural University, Ludhiana.

Increased Honey Output

Scientists of the Punjab Agricultural University have evolved a technique for the introduction of a species of honey bee into another. Entomologists all over the world are keenly interested in the successful experiments conducted in Ludhiana which have enabled the introduction of the Italian queen bee into Indian bee colonies.

On the basis of the technique evolved at Ludhiana, British entomologists now propose to take up the work of introduction of Indian queen bees into Italian bee colonies there.

There are now 33 foreign colonies and 118 Indian colonies in the honey bee farms of the University. Out of the 33 Italian colonies, 16 were raised from the queens imported from abroad while 17 were raised from nucleus colonies imported.

It is now proposed to import about 100 Italian colonies in 1966, in order to help the multiplication process of Italian bees here at a rapid pace.

With the introduction of the foreign species, Punjab has become the only area in the world where all the four species of bees namely Italian bee, Indian bee, the giant bee and the little bee are to be found.

Urdu Lecture Series

The Vice-President, Dr Zakir Husain, will inaugurate the newly instituted Nizam's annual extension lectures in Urdu at the Delhi University early next year.

The Nizam's Charitable Trust has donated Rs. 30,000 to Delhi University for the lectures to be delivered every year in Urdu by eminent scholars on important topics of academic interest.

The Vice-Chancellor, Mr C.D. Deshmukh, has appointed an adhoc committee of distinguished scholars to select the speakers for 1966.

The donors selected Delhi University because "Delhi is the homeland of Urdu where it was born, nourished came to flowering and achieved the distinction of being one of the highly developed expressions of composite culture of India".

TREATISE FOR TIME CAPSULE

The 'Time Capsule' specially designed to encase records of world's progress will contain one of the papers of Dr M.L. Gujral, former principal of King George's Medical College, Lucknow.

Dr Gujral's treatise is the only contribution to medical science in this field which has been accepted by the expert committee authorised to select contents for the 'capsule' to represent world civilisation today.

His paper deals with Chlorpromazine used in the production of anti-emetic effects and in treating certain mental diseases."

The capsule, a huge container, will be opened after a thousand years to give details of present-day civilisation to posterity.

Dr Gujral had sent to the committee five copies of his paper which in print runs into about 20 pages.

Archaeological Find: Archaeological excavations carried out by Vikram University have exposed the ancient remains at Kayastha, near Ujjain, but its age is not definitely determined yet, though it is likely to be older than Circe 2,000 B.C.

The excavation has shown habitation on the site ranging from some time before 200 B.C. right down to the Maratba period.

The older cultural complexes (Chalcolithic) may represent a local development around 2,000 B.C. approximately.

Punjab History Conference

The first annual Punjab History Conference will be held in Patiala under the auspices of the Punjabi University from November 12 to November 14, 1965.

The Conference will meet in different sessions devoted to ancient, medieval and modern history presided over by eminent historians.

The Punjab History Department has undertaken the work of preparing an eight-volume History of the Punjab from pre-vedic period to the present era and reputed historians from all over the world have been asked to contribute to these volumes. Mahamahopadhyaya Datto Varman Poddar, former Vice-Chancellor of Poona University will preside over the general session of the History Conference.

CULTURAL EXCHANGE

INDO-SOVIET AGREEMENT

The Institute of Russian Studies, which will be a part of the Jawaharlal Nehru University, will be opened here on November 14, 1965.

According to the agreement signed between India and the U.S.S.R. the Soviet union will assist in the provision of :

(1) Professors and teachers, whose number will be determined by mutual consultations between the two governments from time to time. For 1965-66, the Soviet Government have agreed to provide up to 15 teachers;

(2) Training facilities in the Soviet Union for 3 to 5 Indian teachers of the Institute every year over the next five years;

(3) Books on Russian language, literature and other subjects for the creation of a library for the Institute ; and

(4) Some scientific and technical equipment for the library of the Institute.

The implementation of the plans for the academic programmes of the proposed institute were drawn up in cooperation with two Soviet specialists in December 1964.

It was then decided to start the institute with a one-year intensive course for training in the Russian language followed by three years of honours degree course in the Russian language, life and literature.

The Institute will have a high standard of training and the pupil teacher ratio will be 1 to 12. Out of the total teaching staff 50 percent will be Indian and the remaining 50 per cent Russian. The number of Indian teachers will go on increasing as more trained Indians are available until the majority of teaching staff are Indians.

It is proposed that the Institute will be a part of the Jawaharlal Nehru University when it is set up.

Until this happens it will be an autonomous organisation with a society and a governing body.

The Institute will, to begin with, provide one year intensive course in Russian language for about 100 students in 1965-66 and will promote translations of books from Russian language into Indian languages and of Indian books into Russian language and literature. There will be facilities for post-graduate courses in the near future.

The Institute will be managed by the Institute of Russian Studies Society and Mr. K.P.S. Menon will be the Chairman of the Governing body of the Institute.

Department of Russian Studies

The Indian School of International Studies proposes to create a department of Soviet studies in the Fourth Plan period in which history and institutions of the Soviet Union would be studied.

The school is an autonomous institution and the approval of the Government of any course of studies proposed is not necessary.

International Student Movement Team

Eight German students, six boys and two girls, are now in this country on a three-month tour under the auspices of the International Student Movement of the United Nations.

The students belonging to various German universities will do voluntary work in social, educational and industrial institutions during the first part of their programme.

Later they will stay in different places in India in order to get to know about the culture and life of the people.

Before they started on their visit, they had a week's orientation course at the German Foundation for Developing Countries, in Berlin.

The tour will include visits to Benaras, Calcutta, Rourkela and Bhubaneswar and is to end at Bombay from where the students will fly home to resume their studies.

Research associates

Three research associates of the Department of Science Education of the National Council of Educational Research and Training left for Moscow under UNESCO's technical assistance scheme for training in science education for six months in the USSR.

The associates are Sarvaahri G. Raju, K.J. Khurana and K.S. Bhandari.

Advice on Book Production

The services of Mr. Arthur Isenberg, an eminent American book-production expert, have been made available by UNESCO to the Ministry of Education as a consultant in the field of Book Production from September 1, 1965.

Mr. Isenberg will advise the Ministry of Education and interested organisations and institutions on various problems in book publishing, including pilot schemes for expansion of rural libraries and reading rooms; creation of national mechanism for the integration of India's regional literatures; and development of publishing and reading materials surveys and other follow-up to research undertakings carried on with reference to the UNESCO Reading materials project.

He will also advise on workshops, exhibitions, distribution problems, designs of publishing, book surveys, other research undertakings and efforts to encourage the further growth of the reading habit in India.

Soviet Hindi Scholar to teach in India

Prof. L.M. Dymshits, a noted Hindi scholar from Soviet Union is in Capital to acquaint himself with Hindi text-books prepared in India, especially those meant for non-Hindi students. He will also collect materials for his own text-books.

A professor of Hindi and Urdu in the Institute of International Relations in Moscow, he is working in the Urdu Department of the Delhi University.

He will also continue his studies in language and literature and will teach Hindi in Indian Institutions.

Seminars

1250 INSTITUTES IN FOURTH PLAN

During the Fourth Plan period University Grants Commission hopes to organise 1,250 summer institutes producing about 62,000 institute-trained school, college and university teachers. The UGC has made a regular assessment of the working of the programme.

This has been done through an evaluation conference where the reports submitted by the summer institute directors were discussed and measures taken to improve the effectiveness of the programme.

Vice-Chancellors, University professors and educationists have expressed the view that the summer institutes are making a positive contribution to the upgrading of standards of instruction by enabling the teachers to acquaint themselves with modern developments in their respective fields of knowledge and curricula, and have to a substantial degree, achieved the underlined objectives.

The Commission is, therefore, planning expansion of the programme.

During 1966, it proposes to organise nearly 50 summer institutes for school teachers and an equal number for college and university teachers. It is hoped that by the end of 1970 there would 300 institutes which will train about 15,000 teachers in a year.

The sponsoring agencies are working out suitable follow-up programmes, as without it, the programme may not have the desired impact. This would not be an easy task to accomplish but it is felt that if the follow-up programme is assiduously pursued by the end of the Fourth Plan nearly 30 to 40 per cent science students of the country would learn the new science by newer methods of approach.

Summer Institutes at Lucknow

The University Grants Commission has sanctioned grants to Lucknow University for organising summer institutes in Chemistry and mathematics for teachers.

The purpose of these institutes is to enable the teachers of the university colleges and secondary schools to keep abreast of recent developments in their respective fields and to acquaint them with new teaching methods and also to promote academic mobility and corporate intellectual life in the country.

The institutes were held from June 7 to July 16, 1965.

SUMMER INSTITUTE OF BIOLOGY

An advanced level Summer Institute of Biology was conducted under the directorship of Prof. A. Abraham, Head of the Department of Botany, Kerala University, from April 26 to June 4, 1965. The Institute was sponsored by the UGC with the financial and technical assistance of the United States Agency for International Development. This was the only advanced level Institute in Biology in India this summer, and was attended by 39 senior research workers and teachers drawn from 22 Indian Universities.

The lectures, discussions and laboratory exercises in the section of Botany were centred round the fields of Genetics, Radiation Biology, Cytology and Plant Breeding. The Zoology part dealt with neurosecretion and physiology.

An American professor, Dr. R.C. Pendleton of Boston College, served on the academic staff. In addition, a few other eminent Indian biologists also served as visiting professors.

Trends in Philosophy

A summer institute on "Recent trends in Indian Philosophy" sponsored by the University Grants Commission was held from September 27 to October 2, 1965 under the auspices of the Department of Philosophy, Annamalai University.

Urdu Seminar

The Department of Urdu, Aligarh Muslim University is organising a seminar on the "Teaching of Urdu Language and Literature in December. The University Grants Commission has provided funds for it.

This seminar is intended to help young teachers of University departments and degree colleges to be up-to-date in the subject and to utilise the latest trends in teaching and research. It is expected that about 30 teachers will participate and 10 senior scholars will initiate the discussions.

The topics to be discussed in the seminar are: Place of Linguistics in Language study, Theories about the origin of Urdu, Urdu grammar, problems in the study of history of Urdu literature, Teaching of prose and a model syllabus for Indian Universities for under-graduate and post-graduate classes.

Hindi Seminar

The Hindi Implementation Board of Delhi University has organised a five-day seminar on "Teaching Through Hindi".

Some of the participants in the seminar were of the view that the importance of making Hindi textbooks and other Hindi publications available cannot be minimised.

More seminars and symposia in Hindi was urged for students to enable the teachers to judge the standard of students and also to ascertain how translations and teaching methods could improve the standard of Hindi in the University.

The Hindi Implementation Board was set up a few years ago to chalk out a programme for switching over from English to Hindi. At present four subjects are taught in Hindi—Political Science, Economics, History and Philosophy.

Language Seminar

The department of English, M.S. University of Baroda held a seminar on English Language teaching at College classes from September 28 to October 10, 1965.

HINDI TAUGHT IN 50 UNIVERSITIES ABROAD

According to information available from the Ministry of Education, more than 50 foreign universities are teaching Hindi.

Among the universities are those of the U.S.A., the U.S.S.R., the United Kingdom, China, France, West Germany, Yugoslavia, the Netherlands, Rumania, Poland, Sweden, Australia, Hungary, Italy and Japan.

The maximum number of universities teaching Hindi are in West Germany. They are Berlin, Bonn, Frankfurt, Göttingen, Heidelberg, Hamburg, München, Hünstein, Saarbrücken, Tübingen and Würzburg.

In America five universities impart learning in Hindi. They are: Columbia University, University of California, University of Chicago, University of Hawaii and University of Pennsylvania.

In the Soviet Union, there are seven institutions offering Hindi: three schools, one each in Leningrad, Moscow and Tashkent, and four universities—two in Moscow and one each in Leningrad and Tashkent.

In China Hindi is taught at the School of Foreign Languages in Peking University.

There are four universities in the Netherlands teaching Hindi. They are: University of Amsterdam, University of Groningen, University of Leiden and University of Utrecht.

Aid for studies abroad

Students proceeding abroad for higher studies or training for which adequate facilities do not exist in India will be granted partial assistance under a scheme prepared by the Ministry of Education.

Under the scheme, interest-bearing loans will be granted to deserving candidates who satisfy certain prescribed conditions.

The amount of the loan is not to exceed Rs. 4,000 per head.

In 1964-65 regular loans were given to 30 students. Forty-five received emergency loans from the Indian missions in Britain, the United States and West Germany.

Study on Indian Economy

A valuable study of development planning and policy in India has been issued by the Institute for Applied Economic Research in Tübingen, West Germany.

The report presents an analysis of Indian economy supported by a discussion of the problems of planning under a democracy.

A note introducing the analysis points out how the principles and processes of planning which are being followed in India will be useful to other developing countries in South East Asia—countries in which India has had a strong spiritual and cultural influence.

Iado-U.S. Research Project

The U.S. Consul-General, Mr Milton C. Rewinkel, on October 20, 1965, presented a cheque to Dr P.K. Sen in Bombay to study the possible connection between aorta and other major blood vessels.

The three-year project, to be carried out at G.S. Medical College and K.E.M. Hospital, is being aided by a US Government research grant of Rs 2,32,682. The grant will enable the setting up of a separate department of blood vessel study.

Higher studies in France

Four candidates have been selected for the award of scholarships offered by the Government of France for higher studies in that country during 1965-66 in the following subjects: Agriculture, French Language and Literature, Cinematography and Statistics.

British Council: Ten scholarships have been offered by the British Council for higher studies in the United Kingdom in the following subjects: History, Economics, English Language and literature; Public Administration and Teaching English as a foreign language.

Grant for research

The University Grants Commission has selected 146 teachers for supplementary award during 1965-66 for "financial assistance to teachers in universities and colleges for undertaking research or learned work in Humanities and Social Sciences". It has sanctioned a grant of Rs. 1,12,550/- for this purpose.

THESIS ON COTTON CROP

Mohinder Singh Mahal has become one of the first candidates of Sciences (Agriculture) in the history of the Lumumba Friendship University in Moscow.

The 35-year-old scientist has proved that the use of herbicides and inter-row cultivation assures bumper crops and obviates the need for manual labour.

Mahal's dissertation is the result of two-year painstaking experiments in Uzbekistan.

Prof Fatikh Bakhtiyev, the official examiner, said that Mahal's dissertation held much significance for India where cotton plantations account for 25 per cent of the world's total. He expressed confidence that Mahal's conclusions will help raise cotton yields in India.

Other scientists, commenting on the dissertation, underlined the scientific value of Mahal's work in which he proved the effectiveness of certain herbicides.

The spacious university auditorium where the thesis was defended was filled to capacity. Students and members of the faculty heartily applauded the new candidate of sciences.

Teachers' Library Scheme

A scheme of giving grants to individual teachers for establishing and enriching their libraries was introduced in 1960-61 by the Marathwada University.

A provision of Rs.3,000 was made in 1961. Since then the scheme has been continued.

A provision of Rs.5,000 for the current financial year was made in 1965-66. Fifty teachers working in affiliated colleges and in university departments got the benefit of this scheme.

Each one has to pay a sum of Rs.160 if his salary is below Rs.500 per month and Rs.200 if his salary is above Rs.500 per month and the university contributes as its share Rs.100 to each teacher who has deposited his share.

The scheme has proved successful with the university teachers.

Campus News

Kennedy Awards Instituted

Bangalore University has instituted two Kennedy awards :

(1) A gold medal to the best candidate in the B.A. degree examination each year.

(2) A cash award to the student who submits the best doctoral thesis in the social sciences at the university each year.

A Kennedy memorial general knowledge contest is also under consideration.

Affiliation granted

The Standing Committee of the Inter-University Board has decided to affiliate the North Bengal University, Siliguri, as a member with effect from 1965-66.

Bill passed

The Punjab Vidhan Parishad passed the Kurukshetra University (Amendment) Bill, 1965 on October 20.

The Bill seeks to provide territorial jurisdiction of the university over an area within a radius of 10 miles of the office of the university. It also vests in the State Government the powers to extend by notification the limits of such area

ITT Convocation

Sixty-six students of the Indian Institute of Technology, Kanpur were awarded degree of Bachelor of Technology in five branches of engineering at the first Convocation of the Institute held here on October 31, 1965. Five students were awarded Ph.D. degrees.

With 900 undergraduates and 200 post-graduate students on the rolls, training is being given in 10 technical fields. About 100 students are at present working for Ph.D.

Gujarat University

Twenty new colleges are ex-



'Project India' group consisting of 14 California University students on a two-month tour of Indian Universities with the Vice-President Dr. Zakir Husain (L. to R.) Shaking hands with the Vice-President is Jewel Lorraine Cooper, while Lynn Alicia France and Elyde Michael looks on.

pected to be started in various parts of Gujarat from the next academic year.

Applications for the affiliation of these new colleges with Gujarat University have already been made.

With more than 120 colleges already affiliated to it Gujarat university will now perhaps have the largest number of Colleges.

Kurukshetra University has started a 20-bed hospital in the varsity campus from October 1, 1965. The hospital is located at a 12-acre site and will serve as the nucleus of the proposed medical faculty.

Kurukshetra University has under consideration a chair of military studies in the name of Guru Govind Singhji.

Kerala University has collected an assemblage of well-preserved fossils of marine invertebrates embedded in a limestone rock at a depth of 100 ft. in Quilon. The fossil collected is being studied by the Department of Geology.

The University has recognised the B.D. examination of the Latern University, Rome, as suitable quali-

fication for admission to B.A. and B.Sc. courses of the university.

Punjab Agricultural University has started work on the second phase of the project on terrain evaluation of the Punjab plains.

The Commerce Department has undertaken a research project regarding incentive schemes in selected industrial units in private and public sectors in Punjab.

New Colleges and Courses of Study

Aligarh University has decided to introduce linguistics as an optional subject for B.A. classes.

A composite course in Urdu with comparative literature has been introduced for the M.A. course to enable students of Urdu literature to become familiar with world literature.

Lucknow University has instituted a diploma course in Criminology. The course includes criminal law, criminology, penology, criminal procedure and law of evidence.

A post-graduate diploma in Zoology extending over a period of one year has also been instituted.

The Russian Association in the University has arranged for the study of Esperanto, one of the six world languages recognised by the UNESCO. Books have been ordered from the Universala Esperanto Asocio, Netherlands.

Mysore University has started a four-year degree course in Teacher education in Science and technology leading to B.Sc. (education) degree from December 1, 1964. This has been approved by the Academic Council.

A one year B. Ed. degree course in Home Science was also instituted on December 1, 1964.

The University college of Music and Dance has started functioning from September 8, 1965.

An institute of Kannada studies is to be instituted in the university shortly.

Nagpur University has started a new course entitled "Junior Diploma Course in Library Science."

Baroda University has started the Manibhai and Kashibhai Arts College and College of Commerce at Padra.

Dr. Herbert George Stubbings of Britain's Naval Scientific Service has joined the Marine Biological Station of Annamalai University at Porto Novo (Madras State) on a four months assignment.

Tibetan Institute

An institute for advanced studies in Buddhism and Tibetan philosophy on the pattern of Nalanda University will be established shortly. The institute is likely to be located at Mussoorie.

After passing the higher secondary Course in modern schools Tibetan boys will join this institute for an eight-year course equivalent to Shastri or Aeharya of the Sanskrit University. The institute will also have another five-year course for the doctorate degree to which students will be admitted after completion of the eight-year course.

Curriculum of the graduate course is already under preparation by the Council of Tibetan scholars.

Institute of Advanced Studies Opened

The President, Dr. S. Radhakrishnan, inaugurated the Indian Institute of Advanced Study at Simla on October 20, 1965.

The Institute is housed in the Rashtrapati Nivas. Its teak panelled chambers have been converted into seminar halls, library rooms and lecture halls.

The library which is meant to be 'the core of the institute' will have 100,000 volumes in five years. It is therefore proposed to follow a vigorous book-acquisition policy. Assistance is being sought for this programme from various sources. The British Council, for instance, have helped the Institute by donating 3000 volumes to the library.

Real academic work will begin in March 1966 when professors, senior and junior fellows join the institute. Scholars of the institute will be selected in collaboration with various Universities.

"Learning and learning alone is the main ideal of the institute. In pursuance of this ideal, the institute purposes to arrange seminars,

symposia, conferences and lectures". Besides, organised research will be undertaken and there will be no regular teaching as such.

To begin with, the institute will confine its activities to the study of Comparative religion and philosophy; Comparative aesthetics and history of art, Comparative philosophy and linguistics; European life and culture and Indian and South-East Asian life and culture.

As regards the main academic programme of the Institute, the central idea is that it should be different from that of other universities. There must be careful avoidance of over-lapping and duplication of activities with other centres of advanced studies and universities.

The overriding emphasis is on depth and quality rather than on diffusion of programmes and activities.

The institute is thus intended to be a home of scholarship, untrammelled by rigid curricula and examinations.

It will be a concourse of bright minds leading to cross-fertilization of ideas and real achievement in the realm of thought.



A view of the Indian Institute of Advanced Studies.

NUMBER OF PH. D THESES ACCEPTED DURING THE PERIOD 1950-51 TO 1962-63
FACULTY OF ARTS (A SUBJECT-WISE CLASSIFICATION)

Subject	1950-51	51-52	52-53	53-54	54-55	55-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63
English	...	5	5	8	2	8	8	5	9	15	15	15	14
Economics	...	18	18	24	33	23	20	25	24	39	51	49	32
History	...	9	5	10	20	9	18	9	17	13	18	15	16
Hindi	...	9	14	11	10	13	22	35	45	57	75	76	94
Linguistics	...	—	—	1	—	—	2	—	2	1	3	2	5
Ancient Indian History & Culture ...	—	—	2	2	1	2	2	5	—	3	1	1	5
Library Science	...	—	—	—	—	—	—	1	—	—	—	—	—
Political "	...	5	7	5	5	12	10	9	26	18	20	28	38
Philosophy	...	6	4	7	10	11	10	13	14	11	22	23	21
Psychology	...	1	1	4	1	3	2	3	3	3	9	11	12
Sociology	...	5	4	2	1	1	7	8	8	13	13	13	21
Sanskrit	...	4	7	5	16	12	11	9	21	25	20	34	39
Archaeology	...	—	—	—	—	1	—	1	2	2	1	3	7

NUMBER OF PH. D. THESES ACCEPTED DURING THE PERIOD 1950-51 TO 1962-63
FACULTY OF SCIENCE (A SUBJECT-WISE CLASSIFICATION)

Subject	1950-51	51-52	52-53	53-54	54-55	55-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63
Anthropology	...	—	1	1	—	1	—	—	3	4	1	3	3
App. Chemistry	...	4	7	2	5	6	5	6	4	8	6	5	4
Mathematics	...	—	1	1	1	2	2	—	—	4	4	1	3
Physics	...	—	1	—	3	2	1	2	—	2	4	3	6
Botany	...	7	7	10	10	24	21	24	36	35	49	62	44
Biochemistry	...	—	1	2	2	3	2	3	4	9	9	7	11
Chemistry	...	45	51	62	84	87	91	105	99	122	139	156	174
Geography	...	—	—	—	1	1	—	2	1	2	—	2	4
Geology	...	—	—	1	2	5	6	6	6	6	4	8	7
Mathematics	...	5	8	10	8	13	13	13	16	13	23	23	11
Meteorology	...	—	—	—	—	—	1	—	—	—	—	—	—
Microbiology	...	2	—	—	—	3	3	1	1	5	6	3	4
Math. Physics	...	—	1	—	—	—	—	—	—	1	—	—	—
Nuclear	...	—	—	—	—	—	—	—	—	1	1	1	1
Physics	...	12	15	22	24	26	37	39	31	42	52	47	63
Statistics	...	—	2	—	1	9	9	3	3	1	4	3	4
Zoology	...	17	13	12	23	36	21	24	28	32	43	40	44

HIGHER EDUCATION IN PARLIAMENT

There is no proposal for opening a Hindi University. But there is one under study for having schools with Hindi as the medium and we have special funds allocated for the purpose, said Mr. M.C. Chagla, Union Minister for Education, replying to questions on Higher Education in Parliament.

"For the propagation and development of Hindi, a humble provision of Rs. 3 lakhs was made in the First Plan. Although a provision of Rs. 230 lakhs was made in the Third Plan in the first four years of the Plan an expenditure of Rs. 318 lakhs has been incurred. During 1965-66 a total of Rs. 191 lakhs has so far been allotted for schemes for the development of Hindi.

Capitation Fees: "Except for seven private engineering colleges in Mysore State no other colleges are known to be seeking donation fees from students.

"Government is considering the report of a fact-finding Committee which has made certain recommendations on the functioning of colleges in Mysore State levying capitation fees."

Science teachers: In order to meet the present acute shortage of science teachers, the National Council of Educational Research and Training has recommended that a special one-year course should be instituted at selected university centres that have well-developed science departments of education.

Graduates in science should be admitted to the course and awarded scholarships of the value of Rs. 75 per mensem. The course should equip the candidates with the knowledge and skills of modern science teaching, experimental work, audio-visual aids together with specialisation in their subjects fields.

University for North Eastern Region: "The whole question of setting up a University for North Eastern Region of India including Assam, Nagaland, NEFA, Manipur and Tripura, is under consideration of the Government."

University Centres: A Scheme for setting up university centres as such has not been drawn up. But it has been suggested to the State Governments in the context of formulation of the Fourth Five Year Plan that in order to consolidate the present position of existing universities and to secure the most effective utilisation of scarce resources, new universities should not be established during the Fourth Plan. Instead, university centres should be set up, each within a complex of colleges with about 10,000 enrolment, where facilities for academic work of university standard are made available in regard to Library, Laboratory and professional staff.

Such centres should be opened in areas where there is no university and preference should be given to places where the colleges have good libraries, laboratories and other facilities.

The centres should be administered by a board of college principals the chairmanship of which may be held by rotation.

Nine new varsities: The University Grants Commission has agreed to the setting up of nine new universities.

They are: Madurai (Madras State); Kanpur and Meerut (UP); Surat and Bhavanagar (Gujarat); Pondicherry; Goa; Jawaharlal Nehru University, New Delhi; and a new affiliating university in Andhra Pradesh.

Of these universities, the Commission has agreed to the establishment of universities at Pondicherry and Goa during the Fourth Plan period.

It was for the State Government concerned with the establishment of each new university to take its own decision whether the new University should be established and if so when.

Two new proposals have also been received, one from Uttar Pradesh for a university at Nainital and another for a university in Himachal Pradesh.

DEFENCE ORIENTED INSTITUTES

The Council of the Institutes of Technology has recommended that the research and development activities of the five Central institutions at Kharagpur, Bombay, Madras, Kanpur and Delhi should be recast and made defence-oriented.

They should also direct their efforts towards making the country self-sufficient in scientific instruments and equipment required for engineering institutions.

The five institutions should design and develop proto-types of selected items of equipment, now being imported, for the purpose of large-scale commercial manufacture.

Presiding over the fifth meeting of the Council in New Delhi, the Union Education Minister, Mr M.C. Chagla, said: "For some time to come, our life is going to be defence-oriented." The time had come when the country should become self-reliant with indigenous technology and should be able to do without importing machines.

The Council felt that with the human resources they had and could mobilise, the institutes should, in cooperation with the defence organisations, work out a purposeful programme to meet their short-term and long-term requirements.

Martyrs' Children

Dr A.C. Joshi, Educational Advisor to the Planning Commission has been deputed to draft a comprehensive scheme for immediate implementation to provide education to the children of Defence personnel killed or wounded in action.

Although the Government had already made arrangements for the education of soldier's wards, it is reported that the various schemes lacked coordination. To overcome this difficulty, pooling of resources of the concerned Ministries to provide facilities over and above the existing ones are already under consideration.

Awards & Scholarships

Commonwealth Scholarships For India

India has the largest number of scholarship holders—193 out of the 1,048. She is also an "awarding" country under the Commonwealth Scholarship Plan and has 52 scholars from other countries.

The report on the plan says that most of the Indian students who were not initially selected for doctoral courses were, "as a result of their sustained hard work, able to impress their supervisors and consequently to get extensions to enable them to work for such courses."

Scholars who returned to India after completing their studies continued to express their entire satisfaction about facilities provided for them in awarding countries.

The subjects being studied by the Commonwealth scholars under the plan include technology, pure science, social studies, medicine, dentistry, veterinary science, agriculture and forestry and the arts.

The report states: Although students from almost all of the Commonwealth countries and territories are studying under the Plan the African countries, the West Indies and the dependent territories have so far been able to make least use of the opportunities which the Plan provides, although these are the areas whose educational needs are perhaps greatest.

A contributing factor to this situation may be that some of these countries, at present, need awards mainly at the under-graduate level, while the Plan is intended primarily for postgraduate students. It is therefore encouraging that during the period covered by this report the number of undergraduate awards has again increased to a total of 104 scholarships.

The report on Commonwealth Scholarship Plan says that 1048 scholars were holding awards in the first terms of the academic years in the various awarding countries. They were from India (193), Pakistan (95), Canada (93), Britain (69), Nigeria (54), and Australia (53). 520 Scholars were studying in Britain, 312 in Canada, and 99 in

Australia. There were also scholars in India (52), New Zealand (25), Pakistan (9), Malaya (9), Rhodesia (8), Nigeria (4), Ceylon (3), Hong Kong (3), Sierra Leone (2) and East Africa (1). With the attainment of the target of 1,000 awards the Plan is now in full operation at this level.

It can be expected that some 400 scholars will be returning home each year from the countries in which they have been studying. Arts and Pure Science account for 50 per cent of all scholars while 20 per cent are studying within the field of Technology. About 75 per cent (775) are candidates for higher degrees.

These figures indicate the Plan's scope and size, while the fact that 14 Commonwealth countries were between them providing facilities for students from 53 countries emphasizes the co-operative nature of the scheme. The popularity of the plan, and some indication of the generally high quality of the Scholars, is indicated by the number of candidates (8835) for the 414 awards taken up during the reporting period.

4,000 Indian Students in West Germany

Altogether about 4,000 Indians were studying in German Universities and engineering colleges or working in factories.

The total number of foreign students in West German universities was 28,000. This represented 10 per cent of the university population in the country.

U.N. Award

Miss Asha Kanwar, a former student of the Punjab University, who stood first in the Diploma in Journalism Examination, 1963, has been awarded the 1965 Hammerskjöld Memorial Scholarship by the United Nations Correspondents Association.

The award provides for a year of study at the Columbia University Graduate School of Journalism.

Miss Kanwar is the first Indian to receive the fellowship under the programme established in memory of Dag Hammerskjöld.

UGC Scholarships

The University Grants Commission has awarded 20 scholarships of the value of Rs. 100 each per month for honours and post-graduate studies in Arabic and Persian.

Those scholarships are only for study at the universities and colleges and not at oriental institutes.

Two-hundred and sixty-five scholarships have been announced by the U.G.C. for post-graduate research at 47 universities in the country. Each university will make its own selection of suitable candidates for the award.

Thirty research fellowships in Engineering and Technology have been made by the U.G.C. this year. The fellowships are for post ME and post M. Tech. research of the value of Rs. 400 per month.

About Rs. 3 lakhs have been granted to 336 teachers to do research in the second award announced by the U.G.C. during 1965. This assistance is for those teachers who are doing research side by side with their teaching work to buy chemicals and equipment and also to facilitate field work wherever necessary.

West German offer

West Germany is offering 50 Scholarships to Indians this year for studies there. The scholarships are being arranged by the German Academic Exchange Service. At present there are 94 Indians studying in West Germany under the programme sponsored by them.

In addition to the 50 scholarships, the Academic Exchange Service will invite several scientists for further studies.

Assistance to poor students: A fund has been started by Nawab Ali Yavar Jung, Vice-Chancellor of the Aligarh University, to assist poor, deserving students.

The fund started with an initial donation of Rs. 12,000, would be utilised for the award of merit scholarships.

News from Abroad

Indological discussions at Heidelberg

Over 400 delegates participated in the Sixteenth Germanic Conference held at Heidelberg University recently.

The section on Indology at the conference began with a discussion on the significance of Dharma in Veda.

Prof Schmidt of Tübingen University spoke on the origins of Ahimsa from the Vedic period upto the days of Manu.

As one of the observers has put it, "Vedic legends, early Indian drama, iconography of the folk art of Bengal, the Indian narrative art as compared with Homer, and last but not least the Kamasutra and Arthasashtra were all brought in. It was a kalidoscopic representation of Indological studies in Germany, fully developed, or rather come to their own, after the Second World War.

"It was a valuable experience to see in flesh and blood the giants of Indology and their emerging disciples who are keen to outdo their gurus in strengthening the bonds of wisdom between the East and the West."

Sea-going laboratory

A research laboratory at sea for use by British universities is to be built in a converted trawler. The Natural Environment Research Council of Britain has bought a trawler for this purpose.

The boat will be refitted to provide laboratory and living accommodation. Radar, a precision echo sounder and electric power for instruments will be provided. There will be facilities for live storage and biological specimens.

Indian Students in Australia

Of the 6,767 overseas students in all Australian institutions of higher learning in 1964, 105 were Indians.

Of the 6,767 students, 3,538 were Malaysians, 1382 were from China (Hong Kong, Formosa and Macao), 261 Indonesians, 171 Thailanders, 98 Vietnamese, 85 Pakistanis and 184 from other Asian countries.

Commonwealth Students Club

The Commonwealth Institute Students Club in London with a membership of over 500, has been found to be a valuable means for students from many different Commonwealth countries to get to know each other and make friends.

The Institute's report pays tribute to the encouraging support given to the Institute by the Commonwealth Governments.

Agricultural Research Service

The governing body of the Indian Council of Agricultural Research has approved a plan for forming an Indian Agricultural Research Service.

The progress of agricultural research in India has been for some time hindered by an acute shortage of technically competent scientists. The reason for this is stated to be the low scale of pay prevailing in the Agricultural Department.

The proposed Agricultural Service is intended to attract and retain the best talent in the Country. When the plan is implemented it is expected that a national programme of agricultural research would become possible.

The following grades are suggested for the Agricultural Research Service:

1. Agricultural Scientist (Category E)—Rs.2,000-100-2500-EB 125-2750;
2. Agricultural Scientist (Category D) Rs. 1600-100-1800-EB -100-2000;
3. Agricultural Scientist (Category CO) Rs. 1,000-60-1600;
4. Agricultural Scientist (Category B) Rs. 750-50—1000 5. Agricultural Scientist (Category A)—Rs. 400-40-600 EB 50-750.

It is proposed that for each discipline of agricultural science, a small body of competent scientists should be set up to screen the present employees and determine the grade as well as the exact salary within the grade which each of them should be given.

Study Concession for Service Personnel

With two years' service in the armed forces, graduates of Madras University can appear for the M.A. examination privately.

This is among the concessions granted to the graduates joining the defence services.

The University Academic Council approved the concessions suggested by its standing committee and also the note prepared by the Vice-Chancellor on concessions to doctors serving in the armed forces during the emergency.

The note said doctors serving in the armed forces should be given preference for all post-graduate studies.

Students leaving college to join the armed forces will, after two years of service, be given the option to rejoin the college at any time and put in the minimum period of attendance to appear for examinations.

Jawans dependents: The Delhi University Students Union has decided to give 10 scholarships to the dependents of jawans who had laid down their lives safeguarding the nation's freedom against foreign aggression.

Part-time degree courses: Diploma holders employed in industrial and technical establishments will be able to take part-time degree courses at two centres being opened in U.P.

This is a part of the Central scheme to provide higher education to technical personnel. Thirty such centres are to be opened throughout the country. The site for the centres in U.P. is being selected in consultation with the Union Government.

College to be named after Nehru

According to Nawab Ali Yavar Jung, Vice-Chancellor of Aligarh Muslim University, the University Medical College would be named as Jawaharlal Medical College.

He made this announcement while addressing the commemoration meeting on the Founder's Day at the University.

REPORT ON TOKYO CONFERENCE

By Dr. C.P. RAMASWAMI AIYER,
President of the Inter-University Board

Having been deputed by the Inter-University Board to attend the Fourth General Conference of the International Association of Universities, I proceeded to Tokyo and was present at the Session from the 31st August to the 6th September. Dr. A.C. Joshi who was on the Executive of the Association, Dr. Malik, Vice-Chancellor of the Calcutta University, Mr. Suraj Bhan, Vice-Chancellor of the Punjab University, and Dr D.S. Reddi, Vice-Chancellor of the Osmania University also attended the Conference.

The first Conference met in Istanbul in 1955 and the membership stood at 250 representing 57 countries. At the Mexico Conference in 1960 the membership had risen to 364 in 70 countries and at the time of the Tokyo Conference the total membership was 458 representing 87 countries. These Conferences were inaugurated at Nice in 1950 and, at that time, European Universities were the main participants. The same was, more or less, the case at Istanbul in 1955. The Mexico Conference was a great success and the setting and history of the University lent a special attractiveness.

Japan's invitation to hold the Conference in Tokyo was accepted with some hesitation because some of the countries in Asia including the Republic of China did not and could not participate; and, comparatively speaking, Asiatic Institutions of higher learning, excepting those from India were few and in the making. However as it happened there was an enthusiastic response from all over the World. It is true, however, as the Secretariat of the Conference remarked in one of its bulletins, travel of University leaders is, in some circles, still regarded as a kind of extravagance. In the result, most of the participants who came to the Conference were leading personalities in the Universities of their respective countries. The Association of Commonwealth Universities, the International Federation of Catholic

Universities, the Union of Latin American Universities and the Chairman of the proposed Association of African Universities were all present as well as the Director-General of the UNESCO. Dr. Morito, former Minister of Education in Japan and at present the President of the University of Hiroshima and of the Japanese General Council of Education, acted as Chairman of the Tokyo Committee and the Crown Prince and Princess of Japan, the Prime Minister and the Minister of Education attended the Session.

Distinguished scholar

The Emperor of Japan and the Empress gave a reception at the Imperial Palace to the participants of the Conference. It may here be noticed that the Emperor of Japan is himself a distinguished scholar and an author in the field of Marine Biology.

Elaborate arrangements were made for travel and for accommodation and practically all the participants stayed at the New Otani Hotel, one of the luxury hotels in Japan whose multi-storied building was constructed within a year by way of preparation for the Olympic Games. The Japanese Government financed the activities of the Conference to a large extent. The expectation that the Conference will be a representative Assembly of the world-wide academic community was realised.

Decisions taken

It was decided at a preliminary meeting of the Organisation held in Paris that three subjects should be dealt with during the deliberations of the Conference.

1. Access to higher education
2. Contribution of higher education to economic and cultural development (especially in South East Asia,
3. University autonomy—its meaning today.

All these subjects had been studied by the Unesco through appropriate Research Committees, and very instructive background documents were prepared.

The University of Tokyo placed at the disposal of the Conference its own premises. It is a State institution for higher education and research having nine Faculties and a Graduate School. A number of research institutes are attached to the University, i.e., those for Oriental Culture, Social Science, Journalism, History, Institute of Infectious Diseases, Astronomical Observatory, Earthquake Research Institute, Industrial Science Institute, Applied Microbiology and Cosmic Ray Laboratory; also Institutes relating to Nuclear Study, Solid State Physics and Ocean Research as well as Space and Aeronautical Science.

Selection by ballot

The University itself is situated in the great Kaga Estate, an ancient garden belonging to a historic Japanese Samurai family. The celebrated Red Gate dating from 1827 built by the Kaga family forms the entrance to the University which, in addition to these premises, has separate buildings allotted to different branches of study. The President of the University is selected by ballot at which all the Professors and Associate Professors take part, his term of office being four years. He is not eligible to serve beyond six years. The total number of under-graduates is about 12,000.

In many ways, the Conference was remarkable and especially so because in the language of the organiser "it took place in a country where an old culture of fastidious traditions and a modern civilisation of advanced technique exist side by side".

As already indicated, the Crown Prince of Japan and the Prime Minister and the Education Minister

(Continued on page 18)

Sports

INTER-UNIVERSITY TOURNAMENTS REVIVED

All Inter-University Tournaments which had to be suspended in the wake of the recent Indo-Pak conflict have been revived with the easing of the situation. Tournaments which were scheduled to be played in the first fortnight of October have been postponed to the last week of October and the rest of the schedule would stand as before.

The new dates of the Badminton Tournament were not suitable to the zonal Organising Universities and, therefore, they have been allowed to conduct their respective parts of the tournament on the dates suitable to them. However, the semi-finals and the finals between zones will be fixed in consultation with the zonal winners. The North Zone and All India Final of the Football Tournament had to be shifted from Lucknow to Kurukshetra as the Lucknow University found it difficult to play the host in consequence of the suspension and revival of the tournaments. Swimming, Diving and Waterpolo events had to be cancelled because of the inability of Calcutta University to conduct the postponed tournament on 29th, 30th and 31st of October, 1965.

New Ventures

The Inter-University Sports Board proposes to launch new ventures to expand its sports activities. The Standing Advisory Committee of the Board at its meeting held on 29th September 1965 in New Delhi decided that the Sports Board should conduct zonal Coaching Camps during the summer vacation. The Sports Board is making a beginning in Hockey and Athletics. The A.I.C.S. will be approached for financial help.

The Advisory Committee also decided to introduce zonal tournaments in the games of Cricket, Hockey, Football and Basketball etc. This scheme is being introduced to facilitate the selections of All-India Combined Universities' Teams which the Sports Board proposes to raise in the near future.



Dr. D.S. Kothari (left) Chairman of the University Grants Commission looks over some of the books at the technical books exhibition. Looking on is Dr. R.R. Brooks of U.S.I.S.

Technical books exhibition

At the "Technical books—USA" exhibition which opened in New Delhi in September 1965 about 7,000 books and 235 professional journals in all the main areas of science and technology were on show. The large variety of subjects covered industrial engineering, electronics, computer programming, space technology, architecture, oceanography and geography science.

The exhibitions is now on view in Bombay. It will be on show later at Bangalore, Madras and Calcutta.

According to USIS sources, about 7,000 students and scientific scholars visited the exhibition during the 20 days it was on view. The morning hours were reserved exclusively for college groups. Film show were also arranged for the students to give them an idea of the latest technological developments.

Language Prize Scheme

Mr Henry-Egar Quillet, a Swiss linguist, who was granted by the

Government a free round trip to India under the language prize scheme of cultural activities programme visited India in the months of August & September.

Gandhi Bhawans at Varsities

Gandhi Bhawans for conducting research in Gandhian philosophy will be established in all universities in the country by the University Grants Commission in collaboration with the Central Gandhi Smarak Nidhi before the celebration of the Gandhi centenary in 1969.

Funds for setting up of the Bhawans have already been allocated, it is reported.

Construction work of the Gandhi Bhawans is already under way in 14 universities.

Combined Universities Team

The Inter-University Sports Board which is participating in the Jawaharlal Nehru Hockey Memorial Tournament has made a preliminary selection of about 30 players. The final selection will be held in New Delhi on November 20, 1965.

(Contd. from page 1)

organisation of the whole university programme.

The report is of the view that there should be no difficulty about completing all admissions to colleges before June 24 each year. This could be done easily especially in case of pre-university classes as the results are announced one month before the reopening of colleges.

The time-tables of supplementary examinations have been so framed that they minimise the number of days given to examinations. Examinations are now held between 8 a.m. and 11 a.m. instead of 9 a.m. and 12 noon so that regular classes can be held after 11.30 a.m. As far as possible, the practical examinations are to be held during Dussehra holidays.

The indiscriminate choice of science courses is stated to be another reason for the high rate of failures in the university examinations.

According to the report, a large number of students take up science courses even though they have little aptitude for studies in this direction. If they could be dissuaded and made to change over to Arts courses it would be of "benefit to all concerned". The report recommends that the university should lay down a rule stipulating that students who fail to secure 45 per cent marks in Mathematics at the pre-university examination should not be allowed to choose Mathematics as a major subject.

The advantages of holding university examinations at the end of every academic year instead of the present two examinations for the three-year degree courses in also underlined in this regard. Similarly, examinations for M.A., M.Sc. and M.Com. courses are recommended in two parts.

In order to induce students to take up these examinations seriously, it says that some credit may be given to their performance at these examinations and heads of Institutes may be empowered not to permit students to appear for public examinations in case their performance at the college examinations is unsatisfactory.

The report points out that in the educational system as it exists today there is the need to lay down

in concrete detail the objective of the various courses of study. It is suggested that.

1. The Boards of Studies in each subject should be specially convened to consider and lay down in concrete terms the functional objectives of teaching the subject at successive stages of each course. In the light of those objectives, courses of study and syllabi should be redrawn.
2. Syllabi for post-graduate courses in science subjects (including Social Sciences) should be revised once in three years, beginning from 1966. The Syllabi drawn up should be flexible enough to accommodate contemporary advances in the field.
3. The scheme for examination should be so devised that it is capable of assessing the realisation of the functional objectives of the course. This will call for continuous work on the reform of examinations by Boards of Studies and Boards of Examiners.

The report was recently considered by the Mysore University Academic Council and after some discussions the following decisions were taken :

Admission to all colleges should be completed before the June 24, for P.U.C. and B. Ed.; before July 1, for First B.A., B.Sc., M.A. and M.Sc.; before July 15, for First B.E. and Pre-Professional Course in Medicine.

The Academic Council accepted in principle to raise the minimum percentage of marks for entry into the University from 35 to 40.

Admission to the Post-Graduate Courses should be limited to students of a high calibre.

The Council agreed that the University Examinations might be held at the end of each year of the three-year degree course and of the M.A., M.Sc. and M. Com. Courses

The Principle of the introduction of the system of internal assessment to the extent of 25 per cent of the total marks for all the University Examinations except P.U.C. was also accepted.

It was further recommended that colleges should conduct at least two examinations per year and it should be possible for heads of institutions to detain students whose performance at the college examinations has not been found satisfactory.

For institutions whose results are not below 5 per cent of the overall results of the university, a five per cent improvement of the results may be fixed as the target. Other institutions should aim at reaching the overall results of the university.

GAS PLANTS

Laboratory
Furniture

GASHOLDERS

Burners/Taps

MANSFIELD

OIL GAS CO. LTD.

G.P.O. BOX NO. 124; CABLE: GASIFY
Calcutta (India) Phone : 242382 (3)

PRESSMAN-M165

The following are the subscription rates from January 1966 :

PERIOD	INDIA	U.S.A.	U.K.
One year	Rs. 5/- ;	\$ 3 ;	Sh. 12
Two years	Rs. 10/- ;	\$ 6 ;	Sh. 24
Three years	Rs. 13/- ;	\$ 8 ;	Sh. 32
Five years	Rs. 20/- ;	\$ 12 ;	Sh. 48

Single Copy 50 Paise

(Contd. from p. 15)

nister delivered opening speeches on the 31st August and the Conference thereafter split up into sub-committees, each one dealing with one of the three subjects which were decided upon as topics for deliberation and discussion. All the speeches made at the Committees and in the plenary sessions which followed the reports of the Committee, were tape-recorded. Speaking for myself, I took part in the discussion on the meaning of 'University Autonomy' at the present time and also spoke on the topic of Access to Higher Education. In my speech on University autonomy, I emphasised that such autonomy should involve absolute independence in the matter of admissions, the curriculum, the selection of Professors and include the complete freedom of teaching, lecturing and discussion.

Increasing cost

I dealt at length with the increasing cost of higher education especially with reference to scientific and technological teaching and research and the consequent and inevitable dependence of Universities on State and Central Governments. I also pointed out that, excepting in the U.S.A. private benefactions were getting to be fewer and fewer. It therefore becomes important that Governments should not, by reason of their economic support to the University, seek to exercise more than the minimum direction of policy and choice of personnel.

A large number of delegates and participants from Asiatic and African countries in the course of their speeches deplored the growing interference by State Governments in the internal affairs of Universities and, lamented the growth of political and non-academic impacts on University life. The subject of students' indiscipline was also discussed at length at the Conference and it was generally agreed that extra-mural activities of the students especially of a political character should be, as far as possible, discountenanced.

It is a great pity that on account of the difficult exchange position, India was not adequately represented in proportion to the number of its Universities and institutions of Higher Research. I understand, however, that the resounding success

of the Conference, in no small measure, was due to the lavish hospitality of the Tokyo University and of several educational and social organisations who arranged for the numerous lunches, dinners and parties which were a feature of the Conference. Certain American Institutions like the Ford Foundation were also understood to have rendered supplementary financial assistance to the delegates.

The Kabuki Theatre gave a performance of Japanese dramatic and dance items and excursions were arranged by the University and the Conference authorities to various places of interest in Tokyo, Yokohama, Kobe and other cities inclusive of the famous Rock Gardens and Kamakura the site of the famous 50' high Buddha image and some famous Shinto shrines. The delegates also went round several factories including the celebrated Sony Transistor factory. At each of these places lunches and refreshments were provided by the University.

Books Exhibition

All exhibition of low-priced text-books in Hindi and Marathi was held by the Nagpur University from September 10 to September 19, 1965. This was a part of the effort to popularise and focus attention on Hindi and Marathi text-books worth prescribing at the university.

Among the exhibits were low-priced American, British and Russian books on technical and other subjects which were written to meet the needs of this country.

More than 2,300 students visited the exhibition and many of them were of the view that such exhibitions should be held periodically to popularise books in regional languages.

PERSONAL

Dr. C. P. Ramaswami Aiyar, Vice-Chancellor, Annamalai University, Annamalai Nagar, who is the President of this Board, has also taken over the Chairmanship of the Standing Committee of the Board with effect from October 21, 1965.

The Vice-Chancellor of Calcutta University, Dr. B. Malik, who was invited to frame a Constitution for Mauritius has completed the work and rejoined duty early in October, 1965.

Prof. N.D. Bajpai, formerly Head of the Hindi Department of the Saugar University, has been appointed Vice-Chancellor of Vikram University.

Dr. S.P. Adinarayanan, head of the Department of Psychology has been appointed as Deputy to the Vice-Chancellor of Annamalai University to carry on the routine administrative work of the university in place of the Vice-Chancellor.



NEW EDITION

H. W. FOWLER'S A Dictionary of Modern English Usage

revised by
Sir Ernest Gowers

The alterations and additions made by Sir Ernest Gowers represent an attempt to do what it may be supposed Fowler himself would have wished to do, if he had been alive today, to keep his book abreast of present-day usage. 25s

OXFORD
UNIVERSITY PRESS



OXFORD'S LOW PRICED TEXTBOOKS

	Rs.	P.
Adams :— Farm Management Crop Manual	7	00
Badgley :— Structural Methods for the Exploration Geologist	15	00
Blommers :— Elementary Statistical Methods	10	00
Bonner :— Morphogenesis	10	00
Burnett :— Oral Microbiology and Infectious Disease	20	00
Dewey :— Experience and Nature	10	00
Dobzhansky :— Genetics and Origin of Species	10	00
Einstein :— Meaning of Relativity	4	00
Foster :— Approved Practices in Soil Conservation	8	00
Freeman :— Theory & Practice of Psychological Testing	12	00
Gus :— Fundamentals of General Surgery	15	00
Granville :— Elements of the Differential and Integral Calculus	10	00
Granville :— Plane Trigonometry and Tables	8	00
Guy :— Elements of Physical Metallurgy	15	00
Harrell :— Industrial Psychology	9	00
Jennings :— Behavior of the Lower Organisms	12	00
Joffe :— The A. B. & of Soils	10	00
Kinney :— Indeterminate Structural Analysis	15	00
Lepawsky :— Administration	10	00
McCombs :— Internal Medicine	15	00
Murphy :— Introduction to Psychology	8	00
Perry :— Artificial Insemination of Farm Animals	10	00
Petrijohn :— Sedimentary Rocks	20	00
Proudit :— Normal & Therapeutic Nutrition	12	00
Scarborough :— Numerical Mathematical Analysis	12	00
Simpson :— Basic Statistics	10	00
Simpson :— Principles of Animal Taxonomy	10	00
Smith :— Psychiatry	12	00
Stebbins :— Variation and Evolution in Plants	12	00
Sulzberger :— Dermatology	20	00
Tukey :— Human Neuroanatomy	15	00
Udall :— The Practice of Veterinary Medicine	15	00
Walker :— Elementary Statistical Methods	8	00
Walker :— Statistical Inference	11	00
Wilks :— Elementary Statistical Analysis	8	00

Order from your local bookseller

Trade orders to India Book House,

OXFORD AND IBH PUBLISHING COMPANY

Calcutta • Bombay • New Delhi

DO YOU HAVE A COPY OF

"UNIVERSITIES' HANDBOOK : INDIA & CEYLON — 1964"

Carefully prepared, the 14th edition of the Handbook, just published by the Inter-University Board of India & Ceylon, gives authentic and detailed information about 55 Indian Universities, 2 Universities in Ceylon, 5 Indian Institutes of Technology and 8 Institutions which are "deemed to be Universities" under Section 3 of the University Grants Commission Act, 1956. Among others, under each University is listed information about the Courses offered by it, Library, Laboratory and other research facilities; Scholarships & Fellowships; Colleges affiliated to it, and Teachers of the University.

Pages—700; Calico-Bound—Price : Rs. 25; S. 6.00; £.2.

The price includes postage in India and by surface mail to other countries.

Indispensable for every college library.

Place your order together with payment with the Secretary, Inter-University Board of India & Ceylon, Rouse Avenue, New Delhi-1.

17 OUTSTANDING TITLES NOW IN COLLIER-MACMILLAN STUDENTS' EDITIONS

BUSINESS—ECONOMICS

MACROECONOMIC THEORY

Gardner Ackley, The University of Michigan

A detailed and rigorous analysis of the development of Keynesian and post-Keynesian macroeconomics and their continuity with classical theories. 597 pp., illus. \$3.00
(Original U.S. list price \$9.00)

ECONOMIC DYNAMICS, 2nd Edition

William J. Baumol, Princeton University, with a contribution by Ralph Turvey, London School of Economics

The first thorough treatment of the theoretical analysis of economic dynamics. 396 pp. \$2.65
(Original U.S. list price \$6.95)

FINANCIAL ACCOUNTING

George O. May, Harvard University

An analysis of financial accounting during the twentieth century based on the author's experience as Senior Partner, Price, Waterhouse & Company. 274 pp. \$2.10
(Original U.S. list price \$5.75)

ESSENTIALS OF ACCOUNTING, Third Edition

William A. Paton & Robert L. Dixon, University of Michigan

This text, a standard reference in the field, provides a thorough presentation of present-day accounting fundamentals. 863 pp. \$4.20
(Original U.S. list price, \$9.00)

CHEMISTRY

ORGANIC SEMICONDUCTORS

Edited by J.L. Brophy & J.W. Buttry, Armour Research Foundation of Illinois Institute of Technology

For the first time in one volume here is the present knowledge of the mechanics of electronic conductivity in solids. 240 pp. \$1.70
(Original U.S. list price, \$9.00)

THE CHEMISTRY OF ORGANIC COMPOUNDS

Fifth Edition

A Year's Course in Organic Chemistry

James Bryant Conant, Harvard University & Arnold Herold Blett, Queens College

Largely rewritten, this edition offers sufficient material for a terminal course and a good foundation for a beginning course. 704 pp. \$3.90
(Original U.S. list price, \$9.25)

QUANTITATIVE CHEMICAL ANALYSIS, 12th Edition

Lester F. Hamilton & Stephen G. Simpson, Massachusetts Institute of Technology, Emeritus

This new edition of a highly successful text has been revised and expanded to reflect the latest developments in theory and methodology. 566 pp. \$3.60
(Original U.S. list price, \$9.50)

TEXTBOOK OF QUANTITATIVE INORGANIC ANALYSIS, Third Edition

I.M. Kolthoff & E.B. Sandell, University of Minnesota

Here is the latest edition of this highly respected chemistry book which is suitable for elementary or advanced courses. 789 pp. \$4.40
(Original U.S. list price, \$9.50)

LABORATORY PRACTICE OF ORGANIC CHEMISTRY, Fourth Edition

G. Ross Robertson & Thomas L. Jacobs, University of California, Los Angeles

For chemistry majors and students contemplating further work in biology, medicine, or chemical engineering. 480 pp., illus. \$2.20.
(Original U.S. list price, \$5.75)

COLLEGE CHEMISTRY: A Systematic Approach.

Second Edition

Harry H. Sisler, University of Florida, & Calvin A. Vander Werf & Arthur Davidson, University of Kansas

The second edition of this basic university chemistry text includes the most recent advances in the field. The books unifying principle is the structural basis of the properties of matter. 709 pp. \$3.40
(Original U.S. list price, \$7.95)

TEXTBOOK OF BIOCHEMISTRY, Third Edition

Edward S. West & Wilbert R. Todd, University of Oregon Medical School

This new edition has been reorganized to cover the latest advances in biochemistry and to further clarify the complex subject matter. 1423 pp. \$7.95
(Original U.S. list price, \$17.50)

ENGINEERING

ENGINEERING ECONOMY, Third Edition

E. Paul De Garmo, University of California, Berkeley

The text has now been expanded and almost completely rewritten to permit a more advanced and rigorous treatment of the fundamental concepts of engineering economy. 600 pp. \$3.65
(Original U.S. list price, \$9.50)

ELEMENTS OF PRODUCTION PLANNING AND CONTROL

Samuel Eilon, University of London

A description of the basis for production planning and control activities from the standpoint of quantitative analysis of problems in batch and continuous production. 592 pp. \$3.00
(Original U.S. list price, \$10.00)

THERMODYNAMICS, 4th Edition

Virgil M. Faires, U.S. Naval Postgraduate School, Monterey, California

With increased presentation of theory, this new revision provides balanced treatment of the applied and theoretical aspects of the field. 704 pp. \$3.20
(Original U.S. list price, \$9.95)

PROBLEMS OF THERMODYNAMICS, Fourth Edition

Virgil M. Faires, U.S. Naval Postgraduate School, Monterey, California

Suitable for use with most standard textbooks, but specifically prepared to parallel Professor Faires' THERMODYNAMICS, 144 pp., \$1.40
(Original U.S. list price, \$2.95)

MATHEMATICS

DIFFERENTIAL AND INTEGRAL CALCULUS, Sixth Ed.

The Late Clyde E. Love. This edition prepared by Earl R. Rainville

A thorough first course in calculus followed by a short introduction to differential equations. 579 pp. \$3.00
(Original U.S. list price, \$7.75)

COLLEGE ALGEBRA, Rev. Edition

Paul R. Rider, Washington University, Emeritus

This revised text features a simplified introduction with a review of elementary algebra and a full discussion of basic ideas and principles. 180 pp. \$2.40
(Original U.S. list price, \$5.25)

COLLIER-MACMILLAN INTERNATIONAL

60 FIFTH AVENUE, NEW YORK N.Y. U.S.A.

